MODIFIED DEACETOXYCEPHALOSPORIN C SYNTHASE (DAOCS) AND X-RAY STRUCTURE

Penicillin and cephalosporin antibiotics are produced either directly by fermentation or by modification of fermentation derived materials containing a beta-lactam ring. The biosynthetic pathway to the penicillins and cephalosporins has been extensively studied and reviewed (J. E. Baldwin and C. J. Schofield, in 'The Chemistry of β-lactams (Ed. M. I. Page), Chapter 1, Blackie, London 1992; Ingolia and Queener, Med. Res. Rev., 1989, 9, 245-264; Aharonowitz, Cohen and Martin, Ann. Rev. Microbiol., 1992, 46, 461-495; Schofield, Bycroft, Baldwin, Hadju, Roach, Current Opinion in Structural Biology, 1997, 7, 857-864) and includes the following steps (Figure 1):

1. Conversion of the tripeptide: L-δ-α-aminoadipoyl-L-cysteinyl-D-valine (ACV) to isopenicillin N in a step catalysed by isopenicillin N synthase (IPNS). This step is common to both penicillin and cephalosporin biosynthesis.

2. In some organisms (*e.g. Penicillium chrysogenum* and *Aspergillus nidulans*) isopenicillin N is converted by exchange of its L-δ-α-aminoadipoyl side chain to penicillins with other side chains, which are normally more hydrophobic than the side chain of isopenicillin N. This conversion is catalysed by an amidohydrolase/ acyltransferase enzyme. Examples of penicillins produced by this biosynthetic process include penicillin G (which has a phenylacetyl side chain) and penicillin V (which has a phenoxyacetyl side chain). These hydrophobic penicillins may be commercially produced via fermentation under the appropriate conditions.

3. In other organisms (e.g. *Streptomyces clavuligerus* and *Cephalosporium acremonium*) isopenicillin N is epimerised to penicillin N. This reaction is catalysed by an epimerase enzyme.

4. In some organisms (*e.g. S. clavuligerus and C. acremonium*) penicillin N is converted to DAOC. This reaction is catalysed by deacetoxycephalosporin C synthase (DAOCS) in some organisms (e.g. *Streptomyces clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

5. In some organisms (e.g. *S. clavuligerus* and *C. acremonium*) DAOC is converted to deacetylcephalosporin C (DAC). This reaction is catalysed by deacetylcephalosporin C synthase (DACS) in some organisms (e.g. *S. clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

Further biosynthetic steps to give other cephalosporin derivatives may also occur, e.g. in *C. acremonium* DAC may be converted to cephalosporin C and in *Streptomyces spp.* DAC may be converted to cephamycin C. The genes encoding for each of the enzymes catalysing steps 1-6 above have been identified and sequenced.

Fermented penicillins, cephalosporins and their biosynthetic intermediates are useful as antibiotics or as intermediates in the production of antibiotics. Penicillins with hydrophobic side chains may be used for the preparation of cephalosporins or intermediates used in the preparation of cephalosporins, e.g. penicillins (including penicillin G and penicillin V) may be used to prepare C-3 exomethylene cephams which may be used as intermediates in the preparation of the commercial antibiotics, *e.g.* Cefachlor.

The enzymes IPNS, DAOCS, DACS and DAOC/DACS are members of an extended family of Fe(II) utilising oxidase and oxygenase enzymes. Most of this family (including DAOCS, DACS and DAOC/DACS) utilise a 2-oxo acid (normally 2-oxoglutarate) as a cosubstrate in addition to dioxygen and the 'prime' substrate (e.g. penicillin N in the case of DAOCS). Since IPNS, does not use 2-oxoglutarate, it has a substantially different mechanism to the 2-oxoglutarate dependent oxygenases, and this gives

rise to a significantly different active site.

The Invention

This invention is based on the determination of the three dimensional crystal structure of DAOCS and the information and developments which come from it. The X-ray co-ordinates provide very detailed 3-dimensional information on the relationships between amino acid residues in the structure of DAOCS and on the binding modes of the Fe-cofactor and the substrates to DAOCS. The structure allows the modification of DAOCS and related enzymes of penicillin and cephalosporin biosynthesis (including DACS and DAOC/DACS) in order to alter their substrate and product selectivities. Since the DAOCS structures are the first from the family of 2-oxoglutarate dependent dioxygenases they also allow for the design of new inhibitors of this family of enzymes. Previously partial overviews of the structures of IPNS complexed to manganese and IPNS complexed to iron and ACV were reported (Roach *et al.*, Nature, 1995, 375, 700-704; Roach *et al.*, Nature, 1997, 387, 827). The structures, as defined by their X-ray co-ordinates, of IPNS complexed to manganese and in complexes with iron, ACV and/or substrate analogues have been reported in Baldwin, Hajdu, Roach, Hensgens, Clifton, GB 9621486.1- (Oxygenase Enzymes and Method).

Procedures have been developed for the production of 7-aminodeacetoxycephaosporin C (7-ADCA) in which recombinant *P. chrysogenum* strains into which the DAOCS gene has been introduced are used for the production of cephalosporins. In particular if adipic acid is added to these recombinant strains adipoyl-6-APA is produced, which is converted by DAOCS into adipoyl-7-ADCA from which the adipoyl side chain can be removed (EPA-A-0532341, Shibata *et al.*, Bioorg. Med. Chem. Letts, 1996, 6, 1579-1584).

The IPNS gene sequence (and therefore the amino acid

sequence) is related but significantly different to those of DAOCS, DACS, DAOC/DACS. It is likely that gross elements of the fold (i.e. significant elements within the 3-dimensional structure) of these enzymes will be conserved but that the active site architecture will be very significantly different. Structural elements conserved are likely to include the beta-barrel 'jelly roll' core and certain alpha-helices (including alpha helix-10, as defined in Roach *et al.*, Nature, 1995, 375, 700-704). The degree of similarity is insufficient to define the precise structure of DAOCS, DACS, or DAOC/DACS from the IPNS structures. To date no models of DAOCS, DACS, or DAOC/DACS based on the IPNS structure have been reported. Nor have any detailed studies on substrate binding of these enzymes been reported. One report (WO 97/20053) claims the use of products resulting from modification of certain residues in DAOCS for the improved conversion of penicillin G to phenyl acetyl (G)-7-aminocephalosporanic acid.

The three-dimensional structure of DAOCS is defined by the X-ray co-ordinates set out below (Structure A).

Also set out below is a high resolution crystal structure of a complex of prokaryotic DAOCS from *S. clavuligerus* with Fe(II) and 2-oxoglutarate (Structure B).

In part the present invention relates to the use of the structures of DAOCS in order to make modifications to it or DACS or DAOC/DACS in order that the modified enzymes catalyse the conversion of unnatural penicillins (e.g. penicillin G and penicillin V) to cephalosporins more efficiently than the wild-type enzyme. Further aspects of the invention relate to the use of the DAOCS structure in order to produce unnatural products in micro-organisms. Such products include exomethylene cephalosporins, with or without alpha-aminoadipoyl or hydrophobic side chain (e.g. phenylacetyl or phenoxyacetyl). Thus one aspect of this invention refers to the use of the structure of DAOCS for modifying DAOCS

(or the closely related enzymes DACS or DAOC/DACS) in order to:

(i) permit the enzyme to accept (or accept more efficiently) unnatural penicillin substrates for the preparation of new or commercially valuable antibacterial materials.

(ii) enable the modified enzyme to produce unnatural (e.g. exomethylene cephams) or optimise the production of minor products (e.g. 3-β-hydroxycephams) for use as antibacterials or as intermediates in the preparation of antibacterials or commercially valuable compounds.

In another aspect this invention provides modified enzymes that result from application of the aforementioned techniques. These are enzymes having significant (as defined below) sequence and thus structural similarity with DAOCS. Thus, structures of these enzymes may be predicted on the basis of the DAOCS structures. Preferably there will be sequence similarity/identity between most of the modified enzyme and a major part of DAOCS. Previous sequence comparisons (Roach *et al.*, Nature, 1995, 375, 700), using pairwise comparisons of the sequences followed by single linkage cluster analysis show that IPNS, DAOCS, DACS and DAOC/DACS cluster with standard deviations scores of >5.0 (Barton and Sternberg, J. Mol. Biol., 1987, **198**, 327). Scores over 5.0 and preferably over 6.0 indicate that the sequence alignments will be correct within all or most of the protein secondary structural elements (Barton, Methods in Enzymol., 1990, **183**, 403); thus they have significantly similar sequences and hence structures. Note there are other criteria which may be used to ascertain significant sequence similarity for example % identity or % similarity of amino acids possessing side chains with similar physico-chemical properties (Barton and Sternberg, J. Mol. Biol., 1987, **198**, 327). Thus, on the basis of sequence comparisons it is possible to predict the structure of one enzyme (e.g. DACS or DAOC/DACS) from another closely related enzyme (e.g. DAOCS). Further, it is recognised that although two enzymes may have structures in which secondary structural elements are

largely or wholly conserved, differences in the structures of the two enzymes may result from the side chains of the amino acids forming the secondary structural elements. The effect of these differences, which alter the substrate/product selectivities of the compared enzymes, is predictable once the three-dimensional structure of one of the enzymes is known.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the side chain binding site of penicillin N or DAOC is modified and at at least one of the following sites at least one amino acid residue is changed to another amino acid residue or is deleted: Thr72, Arg74, Arg75, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301; Tyr302, Val303, Asn304; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Modifications of this kind will permit the expansion of penicillin V or penicillin G to the corresponding cephalosporins. To achieve this it is desirable to increase the kcat/Km for the mutant as compared to the wild type DAOCS. Kinetic results indicate that apparent kcat values for penicillin N and penicillin G are similar but that Km is much higher for penicillin G. Thus based on these analysis, a decrease in the binding constant of DAOCS for penicillin G should make it possible to increase kcat/Km for penicillin G.

The side chain binding pocket of DAOCS is made of residues from different parts of the peptide chain, so it is likely that more than one residue will have to be altered to make a better penicillin G/V expander. Nevertheless some residues are more important than others. Examination of the interactions between the last few C-terminal residues (Thr-308 to Ala-311) of one DAOCS molecule and the active site of another in the crystal structure, suggests a binding mode for the penicillin nucleus which

is shown in Figure 2 of the accompanying drawings. The penam C-3 carboxylate group probably occupies an analogous position to that of Ala-311 from a symmetry related molecule in the active site, forming electrostatic interactions with Arg-162 and Arg-160. The side chain of Arg-160 may also form a hydrogen bonding interaction with the β-lactam carbonyl.

It needs to be borne in mind that protein specificity is generally controlled by more than one amino acid. To alter the specificity of a protein in a major way is likely to require more than one of the mutational changes suggested below, although each of the mutations will contribute. With this in mind, preferred residues to modify for the expansion of a penicillin are as follows:

a) Arg-266. This residue binds with the α-aminoadipate side chain of the natural substrate and should be changed to a residue of more hydrophobic character, e.g. Phe, Ala, Val, Leu, Ile.

b) Thr-72. This should be changed to a hydrophobic residue e.g. Val, Leu, Ile, Phe, Ala, to help bind the hydrophobic side chain of penicillin G. It should be effective in combination with other mutants.

c) Arg-74 may be usefully changed to a neutral or hydrophobic residue (Phe, Tyr, Val, Leu, Ile, Ala). Modification of Arg-75 may be necessary in addition because it forms a hydrogen-bonding network with Arg-74.

d) Glu-156. This residue binds with the α-aminoadipate side chain. It should be changed to one of Ala, Val, Leu, Ile, Phe, Tyr, Trp, Asn, Gln, Ser.

e) The side chains of Leu-158, Asn-301 and Tyr-302 form part of the binding pocket for the penicillin side chain and can be usefully modified to more hydrophobic character.

f) Asn-304. This residue binds the amide linking the side chain to the penam nucleus. Modification is effected to expand penicillins with shortened or no side chains (e.g. to Asp or Glu for 6-Apa).

Note that other changes may be used to construct part or all of a side chain binding pocket via hydrogen bonding or other interactions.

The insertion or deletion of residues into the DAOCS sequence may also be of use in constructing a hydrophobic binding pocket for the penicillin side chain. Insertion of hydrophobic residues into the C-terminal region (residue 300-311 and in particular 301-303) may assist in the construction of a hydrophobic binding pocket for penicillin side chains.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the penicillin/cephalosporin binding site of penicillin N or DAOC is modified and at at least one of the following amino acid residues is changed or deleted: Ile88, Arg160, Arg162, Phe164, Met180, Thr190, Ile192, Phe225, Pro241, Val245, Val262, Phe264, Asn304, Ile305, Arg306, Arg307; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Further discussion of this aspect may be found in Nature Volume 394, pages 805-809 published on 20 August 1998 and incorporated by reference herein.

Another aspect of the invention refers to the use of the structure of DAOCS in order to modify its active site (or that of a structurally related 2-oxoglutarate dependent dioxygenase) in order that the modified enzyme accepts non beta lactam substrates in order to produce oxidised compounds of value. Oxidised amino acids (e.g. 4-hydroxyprolines, hydroxylysines, hydroxyaspartic acids and others) are useful as synthetic intermediates in the production of valuable materials. Using the structure of DAOCS specific residues can be targeted for modification in order that the modified enzyme can be used to produce oxidised amino acids or peptides. The process may include modification of the following residues:

Arg74, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304, Ile88, Arg162, Phe164, Met180, Thr190, Ile192, Pro241, Val245, Val262, Ile305, Arg306, Arg307.

Another aspect of the invention refers to the use of the DAOCS structure for the design of selective inhibitors of 2-oxoglutarate dependent dioxygenases. The 2-oxoglutarate dependent dioxygenase prolyl 4-hydroxylase has been the target of inhibition in order to provide a therapeutic treatment for fibrotic diseases (e.g. liver cirrhosis, arthritis). However, no inhibitors are in clinical use, probably because it is difficult to achieve selective inhibition of the target enzyme for inhibition over other enzymes (including 2-oxoglutarate dependent enzymes). The structure of DAOCS provides a template for the design of inhibitors of 2-oxoglutarate dependent dioxygenases.

Set out below are two high resolution crystal structures for DAOCS from *S. clavuligerus:* the structure of the iron-free apoenzyme (Structure A) and the structure of the complex with Fe(II) and 2-oxoglutarate (Structure B). The results imply a mechanism by which the enzyme-Fe(II) complex reacts with 2-oxoglutarate and dioxygen to give the reactive ferryl species, a process common to many non-haem oxygenases. Other notable 2-oxoacid-dependent ferrous enzymes are prolyl hydroxylase, involved in collagen biosynthesis, gibberellin 3β-hydroxylase, a mutation of which influences stem length in plants, and clavaminic acid synthase, involved in the biosynthesis of the β-lactamase inhibitor, clavulanic acid. Within the family of 2-oxoacid-dependent enzymes, DAOCS belongs to a sub-family, the members of which show sequence similarity with IPNS and 1-aminocyclopropane-1-carboxylate oxidase (the ethylene forming enzyme), enzymes that do not use a 2-oxoacid in catalysis.

The iron-free form of DAOCS crystallises in space group R3

as a crystallographic trimer. The main chain of the protein folds into a conserved jelly roll core with flanking helices.

Co-ordinates and structure factors have been deposited with the Protein Data Bank (entries 1rxg, and r1rxgsf for the Fe(II)-2-oxoglutarate complex).

LEGENDS TO FIGURES.

Figure 1: the biosynthetic pathway to the penicillins and cephalosporins.

Figure 2 is a view of the active site of DAOCS showing 2-oxoglutarate binding to the iron and proposed penicillin N binding. Interactions with the side chains of certain amino acid residues are indicated by arrows.

Structure A is a three-dimensional structure of DAOCS.

Structure B is a high resolution crystal structure for prokaryotic DAOCS from *S. clavuligerus* as a complex with Fe(II) and 2-oxoglutarate.

The peptide sequence of DAOCS (with the numbering used herein) is set out below:

Met Asp Thr Thr Val Pro Thr Phe Ser Leu		10
Ala Glu Leu Gln Gln Gly Leu His Gln Asp		20
Glu Phe Arg Arg Cys Leu Arg Asp Lys Gly		30
Leu Phe Tyr Leu Thr Asp Cys Gly Leu Thr		40
Asp Thr Glu Leu Lys Ser Ala Lys Asp Leu		50
Val Ile Asp Phe Phe Glu His Gly Ser Glu		60
Ala Glu Lys Arg Ala Val Thr Ser Pro Val		70
Pro Thr Met Arg Arg Gly Phe Thr Gly Leu		80
Glu Ser Glu Ser Thr Ala Gln Ile Thr Asn		90
Thr Gly Ser Tyr Ser Asp Tyr Ser Met Cys		100
Tyr Ser Met Gly Thr Ala Asp Asn Leu Phe		110
Pro Ser Gly Asp Phe Gly Arg Ile Trp Thr		120
Gln Tyr Phe Asp Arg Gln Tyr Thr Ala Ser		130
Arg Ala Val Ala Arg Glu Val Leu Arg Ala		140
Thr Gly Thr Glu Pro Asp Gly Gly Val Glu		150
Ala Phe Leu Asp Cys Glu Pro Leu Leu Arg		160
Phe Arg Tyr Phe Pro Gln Val Pro Glu His		170
Arg Ser Ala Glu Glu Gln Pro Leu Arg Met		180
Ala Pro His Tyr Asp Leu Ser Met Val Thr		190
Leu Ile Gln Gln Thr Pro Cys Ala Asn Gly		200
Phe Val Ser Leu Gln Ala Glu Val Gly Gly		210
Ala Phe Thr Asp Leu Pro Tyr Arg Pro Asp		220
Ala Val Leu Val Phe Cys Gly Ala Ile Ala		230
Thr Leu Val Thr Gly Gly Gln Val Lys Ala		240
Pro Arg His His Val Ala Ala Pro Arg Arg		250
Asp Gln Ile Ala Gly Ser Ser Arg Thr Ser		260
Ser Val Phe Phe Leu Arg Pro Asn Ala Asp		270
Phe Thr Phe Ser Val Pro Leu Ala Arg Glu		280
Cys Gly Phe Asp Val Ser Leu Asp Gly Glu		290
Thr Ala Thr Phe Gln Asp Trp Ile Gly Gly		300
Asn Tyr Val Asn Ile Arg Arg Thr Ser Lys		310
Ala		311

STRUCTURE A

CRYST1	106.400	106.400	71.100	90.00	90.00	120.00
SCALE1		0.009398	0.005426	0.000000	0.000000	
SCALE2		0.000000	0.010852	0.000000	0.000000	
SCALE3		0.000000	0.000000	0.014065	0.000000	

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ATOM    1    N    AMET 1    31.434   10.641   59.873 0.542 44.31
ANISOU  1    N    AMET 1    8315     2319     6203    -614  -3454  -791
ATOM    2    CA   AMET 1    30.985   11.769   59.065 0.542 39.90
ANISOU  2    CA   AMET 1    9037     3006     3117    -786  -1026  -296
ATOM    3    C    AMET 1    30.472   12.900   59.956 0.542 28.97
ANISOU  3    C    AMET 1    4807     3113     3086    -421  -2189  -119
ATOM    4    O    AMET 1    29.961   12.670   61.055 0.542 28.12
ANISOU  4    O    AMET 1    3925     2381     4377    -402  -1097  7  4
ATOM    5    CB   AMET 1    29.970   11.328   58.023 0.542 34.85
ANISOU  5    CB   AMET 1    7877     3692     1672    30  -91  -373
ATOM    6    CG   AMET 1    28.626   12.015   57.903 0.542 38.19
ANISOU  6    CG   AMET 1    7367     4873     2270    133   912  -1765
ATOM    7    SD   AMET 1    27.564   11.232   56.654 0.542 47.19
ANISOU  7    SD   AMET 1    6146     7957     3827    -2344 1050  -1326
ATOM    8    CE   AMET 1    28.129   11.973   55.135 0.542 27.10
ANISOU  8    CE   AMET 1    5030     2111     3155    2345  -1467  -  9
ATOM    9    N    AASP 2    30.592   14.105   59.425 0.268 30.20
ANISOU  9    N    AASP 2    4674     3022     3777    -1210 -782  -383
ATOM    10   CA   AASP 2    29.993   15.322   59.963 0.268 34.22
ANISOU  10   CA   AASP 2    5567     2803     4633    -1106 -964  -525
ATOM    11   C    AASP 2    28.494   15.268   59.655 0.268 33.34
ANISOU  11   C    AASP 2    5665     1997     5006    -314  -1457  877
ATOM    12   O    AASP 2    28.099   15.650   58.551 0.268 44.76
ANISOU  12   O    AASP 2    6859     5248     4901    -1023 -1582  1631
ATOM    13   CB   AASP 2    30.629   16.528   59.281 0.268 25.98
ANISOU  13   CB   AASP 2    4424     3085     2361    322   -1794  582
ATOM    14   CG   AASP 2    29.978   17.862   59.553 0.268 38.05
ANISOU  14   CG   AASP 2    6456     2611     5389    -501  -608  -1114
ATOM    15   OD1  AASP 2    28.995   17.937   60.318 0.268 42.35
ANISOU  15   OD1  AASP 2    6406     504  9179    873   920  1991
ATOM    16   OD2  AASP 2    30.449   18.885   58.997 0.268 28.59
ANISOU  16   OD2  AASP 2    1619     2901     6341    790   -1022  -253
ATOM    17   N    BMET 1    32.709   12.640   58.544 0.458 29.49
ANISOU  17   N    BMET 1    4552     2218     4435    -105  1580  477
ATOM    18   CA   BMET 1    31.874   13.050   57.425 0.458 40.62
ANISOU  18   CA   BMET 1    4228     4809     6395    580   210  103
ATOM    19   C    BMET 1    30.884   14.113   57.894 0.458 38.21
ANISOU  19   C    BMET 1    5082     3637     5797    282   -909  -915
ATOM    20   O    BMET 1    30.075   14.599   57.110 0.458 44.81
ANISOU  20   O    BMET 1    8292     3208     5525    2071  -656  -12
ATOM    21   CB   BMET 1    31.131   11.857   56.829 0.458 33.14
ANISOU  21   CB   BMET 1    4866     2613     5114    2013  -122  818
ATOM    22   CG   BMET 1    29.625   11.840   56.968 0.458 40.28
ANISOU  22   CG   BMET 1    4795     5740     4768    230   -751  5  3
ATOM    23   SD   BMET 1    28.761   11.495   55.422 0.458 34.23
ANISOU  23   SD   BMET 1    5619     3819     3566    2050  -215  2  0
ATOM    24   CE   BMET 1    29.953   12.079   54.222 0.458 54.24
ANISOU  24   CE   BMET 1    10672    4519     5420    1149  4083  -2463
ATOM    25   N    BASP 2    30.914   14.381   59.194 0.732 37.72
ANISOU  25   N    BASP 2    4433     3914     5984    -1323 -1208  -1385
ATOM    26   CA   BASP 2    29.979   15.308   59.811 0.732 35.78
ANISOU  26   CA   BASP 2    5412     3387     4794    -1064 -1050  -795
ATOM    27   C    BASP 2    28.536   14.886   59.567 0.732 29.66
ANISOU  27   C    BASP 2    4876     1624     4771    27  -1561  1218
ATOM    28   O    BASP 2    28.181   14.602   58.414 0.732 34.65
ANISOU  28   O    BASP 2    4375     3689     5100    65  -1485  247
ATOM    29   CB   BASP 2    30.195   16.696   59.181 0.732 37.39
ANISOU  29   CB   BASP 2    6632     3351     4222    -1850 869  -1518
ATOM    30   CG   BASP 2    29.562   17.730   60.104 0.732 30.38
ANISOU  30   CG   BASP 2    3243     3791     4510    -500  -606  -1191
ATOM    31   OD1  BASP 2    28.866   17.247   61.030 0.732 48.88
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ANISOU   31  OD1 BASP   2     6276   4203   8095  -1203  3147  -1901
ATOM     32  OD2 BASP   2    29.760 18.945 59.875  0.732 34.85
ANISOU   32  OD2 BASP   2     2852   3708   6680   -491   444  -1450
ATOM     33  N   THR    3    27.717 14.789 60.606  1.000 35.58
ANISOU   33  N   THR    3     4586   4123   4811    601  -1628  1516
ATOM     34  CA  THR    3    26.303 14.433 60.495  1.000 40.48
ANISOU   34  CA  THR    3     4650   4555   6175    371  -911  -385
ATOM     35  C   THR    3    25.382 15.647 60.611  1.000 39.82
ANISOU   35  C   THR    3     4376   4155   6598    320  -3864  -586
ATOM     36  O   THR    3    24.150 15.556 60.751  1.000 33.55
ANISOU   36  O   THR    3     4668   3107   4972    357  -2748  -588
ATOM     37  CB  THR    3    25.905 13.450 61.613  1.000 39.95
ANISOU   37  CB  THR    3     3787   4004   7387    160  -1209   6   2
ATOM     38  OG1 THR    3    26.591 13.851 62.817  1.000 61.83
ANISOU   38  OG1 THR    3     10134   5882   7476  -4164 -3020  2051
ATOM     39  CG2 THR    3    26.399 12.052 61.278  1.000 59.32
ANISOU   39  CG2 THR    3     4613   3971  13955   1114  -3135  -198
ATOM     40  N   THR    4    26.036 16.780 60.456  1.000 32.55
ANISOU   40  N   THR    4     4306   4611   3450    377  -2166  -217
ATOM     41  CA  THR    4    25.439 18.092 60.393  1.000 31.22
ANISOU   41  CA  THR    4     4275   4229   3358    -81  -1179   9   5
ATOM     42  C   THR    4    24.672 18.272 59.090  1.000 30.06
ANISOU   42  C   THR    4     4876   3341   3207    773  -1156  -204
ATOM     43  O   THR    4    25.195 17.935 58.017  1.000 31.64
ANISOU   43  O   THR    4     4877   3780   3363   1935  -1255   -52
ATOM     44  CB  THR    4    26.510 19.208 60.407  1.000 32.31
ANISOU   44  CB  THR    4     2320   4762   5194    475   -547   593
ATOM     45  OG1 THR    4    27.324 19.091 61.578  1.000 32.36
ANISOU   45  OG1 THR    4     3705   3955   4635    -79   -797  -389
ATOM     46  CG2 THR    4    25.852 20.582 60.458  1.000 27.22
ANISOU   46  CG2 THR    4     3728   4174   2443     71   304  -151
ATOM     47  N   VAL    5    23.464 18.796 59.211  1.000 21.69
ANISOU   47  N   VAL    5     4041   1985   2215   -543   -657  1158
ATOM     48  CA  VAL    5    22.690 19.140 58.024  1.000 20.42
ANISOU   48  CA  VAL    5     3675   1964   2120   -622   -517  103
ATOM     49  C   VAL    5    23.199 20.489 57.499  1.000 17.01
ANISOU   49  C   VAL    5     2263   1803   2396   -279   -622    8   9
ATOM     50  O   VAL    5    23.156 21.449 58.252  1.000 21.10
ANISOU   50  O   VAL    5     3662   1885   2472   -389   -656    1   6
ATOM     51  CB  VAL    5    21.204 19.216 58.402  1.000 24.22
ANISOU   51  CB  VAL    5     3551   2155   3495  -1045  -396  7 83
ATOM     52  CG1 VAL    5    20.434 19.700 57.166  1.000 20.14
ANISOU   52  CG1 VAL    5     3202   1779   2672   -453    10  -226
ATOM     53  CG2 VAL    5    20.701 17.867 58.860  1.000 28.58
ANISOU   53  CG2 VAL    5     5258   2086   3516  -1226   431   510
ATOM     54  N   PRO    6    23.750 20.542 56.300  1.000 16.95
ANISOU   54  N   PRO    6     2378   1629   2434     29  -594   301
ATOM     55  CA  PRO    6    24.354 21.793 55.857  1.000 16.90
ANISOU   55  CA  PRO    6     1645   1775   3000      6  -445   303
ATOM     56  C   PRO    6    23.298 22.800 55.383  1.000 15.61
ANISOU   56  C   PRO    6     1477   1766   2687   -192  -437  545
ATOM     57  O   PRO    6    22.133 22.432 55.201  1.000 15.75
ANISOU   57  O   PRO    6     1578   1761   2647   -260  -579   5   5
ATOM     58  CB  PRO    6    25.216 21.375 54.682  1.000 19.85
ANISOU   58  CB  PRO    6     2320   1752   3468     50  70  182
ATOM     59  CG  PRO    6    24.632 20.095 54.187  1.000 24.76
ANISOU   59  CG  PRO    6     3550   2953   2904  -1186  300  -286
ATOM     60  CD  PRO    6    23.926 19.428 55.357  1.000 17.91
ANISOU   60  CD  PRO    6     1960   1962   2882   -168  -138  -44
ATOM     61  N   THR    7    23.723 24.031 55.156  1.000 14.38
ANISOU   61  N   THR    7     1518   1567   2378   -158  -616  100
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ATOM     62   CA  THR   7    22.907  25.103  54.610 1.000 14.09
ANISOU   62   CA  THR   7    1625    1554    2174    -255  -581 2 2 8
ATOM     63   C   THR   7    23.605  25.684  53.374 1.000 14.74
ANISOU   63   C   THR   7    1683    1849    2067    -193  -468 1 2 1
ATOM     64   O   THR   7    24.828  25.894  53.423 1.000 15.95
ANISOU   64   O   THR   7    1752    2137    2171    -378  -457 1 8 5
ATOM     65   CB  THR   7    22.795  26.248  55.637 1.000 15.25
ANISOU   65   CB  THR   7    1548    1846    2401    56 -124  5 2
ATOM     66   OG1 THR   7    22.208  25.717  56.829 1.000 16.91
ANISOU   66   OG1 THR   7    1818    2149    2458    -402  -183 4 7
ATOM     67   CG2 THR   7    21.952  27.387  55.040 1.000 16.09
ANISOU   67   CG2 THR   7    1651    1613    2848    -138  -263 - 2 5
ATOM     68   N   PHE   8    22.830  25.892  52.325 1.000 15.06
ANISOU   68   N   PHE   8    1966    1618    2137    -411  -558 2 3 0
ATOM     69   CA  PHE   8    23.317  26.545  51.136 1.000 14.76
ANISOU   69   CA  PHE   8    1857    1558    2192    -213  -411 2 8 1
ATOM     70   C   PHE   8    22.421  27.728  50.810 1.000 14.94
ANISOU.70   C   PHE   8    1907    1421    2347    -275  -357 1 8 1
ATOM     71   O   PHE   8    21.198  27.678  50.995 1.000 16.40
ANISOU   71   O   PHE   8    1782    1642    2808    -197  -550 3  4
ATOM     72   CB  PHE   8    23.242  25.562  49.948 1.000 16.49
ANISOU   72   CB  PHE   8    2123    1854    2287    49 -371  - 1
ATOM     73   CG  PHE   8    24.225  24.432  50.027 1.000 14.92
ANISOU   73   CG  PHE   8    1710    1824    2135    -197  -365 1 6 3
ATOM     74   CD1 PHE   8    23.822  23.227  50.600 1.000 16.78
ANISOU   74   CD1 PHE   8    1808    1726    2842    -300  -358 1 8 4
ATOM     75   CD2 PHE   8    25.539  24.558  49.602 1.000 16.67
ANISOU   75   CD2 PHE   8    1705    2130    2500    -310  -361 3 2 1
ATOM     76   CE1 PHE   8    24.702  22.183  50.742 1.000 16.74
ANISOU   76   CE1 PHE   8    2035    1966    2359    -4 -99 2 9 5
ATOM     77   CE2 PHE   8    26.420  23.525  49.773 1.000 19.18
ANISOU   77   CE2 PHE   8    1398    2153    3736    -408  -631 1 8 7
ATOM     78   CZ  PHE   8    26.026  22.336  50.351 1.000 17.90
ANISOU   78   CZ  PHE   8    1849    2003    2948    -119  -376 2  0
ATOM     79   N   SER   9    23.023  28.776  50.314 1.000 14.82
ANISOU   79   N   SER   9    2134    1488    2008    -351  -528 3 1 0
ATOM     80   CA  SER   9    22.338  29.902  49.715 1.000 15.12
ANISOU   80   CA  SER   9    2037    1259    2449    -357  -571 1 3 4
ATOM     81   C   SER   9    21.977  29.607  48.270 1.000 16.19
ANISOU   81   C   SER   9    2138    1791    2224    -374  -535 5 4 7
ATOM     82   O   SER   9    22.877  29.312  47.473 1.000 17.04
ANISOU   82   O   SER   9    2191    1892    2393    -423  -544 2 3 2
ATOM     83   CB  SER   9    23.306  31.113  49.696 1.000 18.74
ANISOU   83   CB  SER   9    2891    1712    2519   -1012 -478 7 1 7
ATOM     84   OG  SER   9    22.738  32.131  48.853 1.000 20.82
ANISOU   84   OG  SER   9    2866    1569    3477    -662  -854 6 0 7
ATOM     85   N   LEU  10    20.697  29.674  47.924 1.000 16.46
ANISOU   85   N   LEU  10    2215    1495    2542    -228  -740 - 4 8
ATOM     86   CA  LEU  10    20.345  29.401  46.529 1.000 17.55
ANISOU   86   CA  LEU  10    2263    1856    2551    -582  -694 3  6
ATOM     87   C   LEU  10    21.079  30.373  45.591 1.000 18.84
ANISOU   87   C   LEU  10    2506    1870    2784    -596  -830 3 5 7
ATOM     88   O   LEU  10    21.573  30.025  44.520 1.000 20.19
ANISOU   88   O   LEU  10    2705    2263    2704    -524  -663 5 0 8
ATOM     89   CB  LEU  10    18.844  29.559  46.327 1.000 18.87
ANISOU   89   CB  LEU  10    2302    2516    2354    -288  -715 2 8 0
ATOM     90   CG  LEU  10    18.355  29.333  44.895 1.000 18.28
ANISOU   90   CG  LEU  10    2182    2172    2591    -668  -677 - 3 0 1
ATOM     91   CD1 LEU  10    18.708  27.955  44.397 1.000 22.45
ANISOU   91   CD1 LEU  10    3418    2024    3089    -308  -537 1  7
ATOM     92   CD2 LEU  10    16.852  29.603  44.869 1.000 21.93
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ANISOU   92  CD2 LEU  10  2250   2658   3424   -504  -1139  7  5
ATOM     93  N   ALA  11  21.154 31.638 46.037 1.000 20.05
ANISOU   93  N   ALA  11  2862   1780   2977   -595  -1279  4  7  2
ATOM     94  CA  ALA  11  21.810 32.647 45.202 1.000 24.24
ANISOU   94  CA  ALA  11  3160   1670   4380   -455  -979  8  9  1
ATOM     95  C   ALA  11  23.285 32.309 44.946 1.000 21.06
ANISOU   95  C   ALA  11  3128   1937   2937   -644  -1016  4  3  1
ATOM     96  O   ALA  11  23.819 32.447 43.829 1.000 26.29
ANISOU   96  O   ALA  11  3569   3261   3158   -1628 -923  1  1  3  7
ATOM     97  CB  ALA  11  21.752 33.989 45.953 1.000 24.29
ANISOU   97  CB  ALA  11  3740   1692   3797   -461  -216  9  9  6
ATOM     98  N   GLU  12  23.953 31.844 46.005 1.000 20.65
ANISOU   98  N   GLU  12  2829   1975   3044   -828  -930  6  7  4
ATOM     99  CA  GLU  12  25.354 31.463 45.862 1.000 21.19
ANISOU   99  CA  GLU  12  3036   2400   2615   -506  -715  5  9  8
ATOM    100  C   GLU  12  25.483 30.277 44.920 1.000 21.56
ANISOU  100  C   GLU  12  3894   2179   2117   -702  -206  9  8  8
ATOM    101  O   GLU  12  26.375 30.215 44.069 1.000 21.98
ANISOU  101  O   GLU  12  3463   2917   1971   -1144 -488  6  1  8
ATOM    102  CB  GLU  12  26.032 31.170 47.204 1.000 20.27
ANISOU  102  CB  GLU  12  2874   2192   2636   -221  -624  5  0  1
ATOM    103  CG  GLU  12  26.156 32.451 48.032 1.000 20.54
ANISOU  103  CG  GLU  12  2889   2316   2598   -344  -516  4  0  6
ATOM    104  CD  GLU  12  26.787 32.279 49.389 1.000 21.86
ANISOU  104  CD  GLU  12  3146   2542   2619   -1297 -612  7  9  9
ATOM    105  OE1 GLU  12  27.068 31.149 49.803 1.000 24.98
ANISOU  105  OE1 GLU  12  3642   2681   3169   -1348 -1088  1  1  3  4
ATOM    106  OE2 GLU  12  26.819 33.305 50.092 1.000 33.52
ANISOU  106  OE2 GLU  12  5881   2966   3888   -1119 -2251  4  6
ATOM    107  N   LEU  13  24.600 29.295 45.060 1.000 18.91
ANISOU  107  N   LEU  13  2567   2345   2275   -351  -390  3  8  2
ATOM    108  CA  LEU  13  24.645 28.117 44.174 1.000 18.61
ANISOU  108  CA  LEU  13  2575   2347   2149   -209  270   4  0  6
ATOM    109  C   LEU  13  24.432 28.566 42.738 1.000 21.40
ANISOU  109  C   LEU  13  3558   2367   2206   -709  -41   5  2  6
ATOM    110  O   LEU  13  25.102 28.095 41.824 1.000 23.75
ANISOU  110  O   LEU  13  3827   3216   1981   -823  -117  1  9  0
ATOM    111  CB  LEU  13  23.541 27.137 44.562 1.000 18.97
ANISOU  111  CB  LEU  13  2982   2243   1984   -462  -145  4  4  0
ATOM    112  CG  LEU  13  23.773 26.344 45.860 1.000 18.57
ANISOU  112  CG  LEU  13  2313   2322   2422   -467  -362  7  4  5
ATOM    113  CD1 LEU  13  22.526 25.480 46.070 1.000 20.74
ANISOU  113  CD1 LEU  13  2769   2266   2845   -789  -142  5  9  4
ATOM    114  CD2 LEU  13  25.023 25.473 45.858 1.000 19.80
ANISOU  114  CD2 LEU  13  2709   2229   2585   -244  -509 -1  0  7
ATOM    115  N   GLN  14  23.544 29.508 42.478 1.000 22.03
ANISOU  115  N   GLN  14  3596   2139   2635   -960  -903  3  7  9
ATOM    116  CA  GLN  14  23.284 29.978 41.104 1.000 23.79
ANISOU  116  CA  GLN  14  3010   3335   2694   -992  -816  6  4  8
ATOM    117  C   GLN  14  24.481 30.712 40.509 1.000 25.44
ANISOU  117  C   GLN  14  3360   3427   2881   -1070 -382  4  8  7
ATOM    118  O   GLN  14  24.655 30.829 39.288 1.000 30.04
ANISOU  118  O   GLN  14  3836   4657   2922   -1208 -427  8  9  8
ATOM    119  CB  GLN  14  22.064 30.906 41.131 1.000 26.28
ANISOU  119  CB  GLN  14  3133   3630   3222   -760  -863  9  3  8
ATOM    120  CG  GLN  14  20.772 30.111 41.355 1.000 23.26
ANISOU  120  CG  GLN  14  3106   2319   3413   -299  -577  5  1  4
ATOM    121  CD  GLN  14  19.586 31.020 41.631 1.000 23.69
ANISOU  121  CD  GLN  14  3384   2462   3155   -317  -393 -1  9  6
ATOM    122  OE1 GLN  14  19.734 32.104 42.160 1.000 28.34
ANISOU  122  OE1 GLN  14  4973   2619   3175   -183  -732 -4  0  8
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ATOM    123  NE2 GLN  14   18.398  30.513  41.349 1.000 23.60
ANISOU  123  NE2 GLN  14    3058    2969    2941   -383   54 245
ATOM    124  N   GLN  15   25.309  31.243  41.395 1.000 25.00
ANISOU  124  N   GLN  15    3078    3281    3140  -1159 -394 575
ATOM    125  CA  GLN  15   26.530  31.936  40.945 1.000 24.05
ANISOU  125  CA  GLN  15    2947    3560    2631   -866  -98 655
ATOM    126  C   GLN  15   27.650  30.920  40.707 1.000 26.06
ANISOU  126  C   GLN  15    3810    3951    2139   -345  406 668
ATOM    127  O   GLN  15   28.756  31.284  40.302 1.000 35.85
ANISOU  127  O   GLN  15    4294    4851    4476   102  1871 1192
ATOM    128  CB  GLN  15   27.018  32.918  42.009 1.000 25.90
ANISOU  128  CB  GLN  15    3055    3037    3748  -1092 -109 364
ATOM    129  CG  GLN  15   26.103  34.092  42.219 1.000 31.24
ANISOU  129  CG  GLN  15    4562    2577    4731   -806  962 1054
ATOM    130  CD  GLN  15   26.503  35.022  43.348 1.000 59.75
ANISOU  130  CD  GLN  15    9927    2475   10301  -1855  -14 -1904
ATOM    131  OE1 GLN  15   27.634  35.031  43.840 1.000 81.81
ANISOU  131  OE1 GLN  15   15059    3931   12094  -944 -6272 -1803
ATOM    132  NE2 GLN  15   25.539  35.841  43.767 1.000 91.46
ANISOU  132  NE2 GLN  15   14070    4846   15833  -923  3672 -4850
ATOM    133  N   GLY  16   27.379  29.643  40.969 1.000 29.90
ANISOU  133  N   GLY  16    4634    3820    2907   -239   22 787
ATOM    134  CA  GLY  16   28.410  28.649  40.699 1.000 28.76
ANISOU  134  CA  GLY  16    4466    3629    2833   -709  461 250
ATOM    135  C   GLY  16   29.339  28.473  41.878 1.000 27.60
ANISOU  135  C   GLY  16    3816    3779    2891   -616  914 1485
ATOM    136  O   GLY  16   30.398  27.867  41.725 1.000 31.47
ANISOU  136  O   GLY  16    3386    4758    3814   -899 1243 1023
ATOM    137  N   LEU  17   28.960  28.898  43.083 1.000 26.01
ANISOU  137  N   LEU  17    3295    3636    2950   -721  162 743
ATOM    138  CA  LEU  17   29.776  28.666  44.257 1.000 23.96
ANISOU  138  CA  LEU  17    2700    3032    3372   -601  100 673
ATOM    139  C   LEU  17   29.462  27.338  44.932 1.000 20.31
ANISOU  139  C   LEU  17    2222    2763    2733   -252  611 261
ATOM    140  O   LEU  17   28.389  26.780  44.789 1.000 23.13
ANISOU  140  O   LEU  17    2347    3134    3308   -443  263 859
ATOM    141  CB  LEU  17   29.645  29.806  45.286 1.000 25.94
ANISOU  141  CB  LEU  17    2886    2933    4035  -1318 -405 254
ATOM    142  CG  LEU  17   29.962  31.209  44.716 1.000 31.57
ANISOU  142  CG  LEU  17    3741    2948    5308   -523 1150 722
ATOM    143  CD1 LEU  17   29.550  32.358  45.615 1.000 32.04
ANISOU  143  CD1 LEU  17    5221    2887    4066  -1269 278  508
ATOM    144  CD2 LEU  17   31.458  31.278  44.416 1.000 38.11
ANISOU  144  CD2 LEU  17    3828    5491    5160  -2315 954  232
ATOM    145  N   HIS  18   30.441  26.822  45.681 1.000 22.49
ANISOU  145  N   HIS  18    2600    3067    2877   -662  42 449
ATOM    146  CA  HIS  18   30.289  25.644  46.537 1.000 21.54
ANISOU  146  CA  HIS  18    2378    2809    2996   -432  201 313
ATOM    147  C   HIS  18   29.908  24.376  45.790 1.000 22.76
ANISOU  147  C   HIS  18    2256    3245    3148  -1009 282  114
ATOM    148  O   HIS  18   29.147  23.565  46.331 1.000 22.60
ANISOU  148  O   HIS  18    2008    3064    3516   -629 -166 884
ATOM    149  CB  HIS  18   29.224  25.872  47.618 1.000 22.81
ANISOU  149  CB  HIS  18    2514    2879    3272   -526  450  421
ATOM    150  CG  HIS  18   29.320  27.248  48.217 1.000 21.70
ANISOU  150  CG  HIS  18    2797    3038    2411   -149  39 503
ATOM    151  ND1 HIS  18   30.438  27.773  48.807 1.000 25.01
ANISOU  151  ND1 HIS  18    3714    3505    2284   -207 -629 149
ATOM    152  CD2 HIS  18   28.370  28.216  48.269 1.000 24.95
ANISOU  152  CD2 HIS  18    3244    3278    2957   87 544 275
ATOM    153  CE1 HIS  18   30.197  28.982  49.223 1.000 29.26
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ANISOU  153  CE1 HIS  18   4603    3396    3118   -388  -335 2 7
ATOM    154  NE2 HIS  18   28.937  29.271  48.919 1.000 27.24
ANISOU  154  NE2 HIS  18   4582    3137    2632   2  224 3 6 5
ATOM    155  N   GLN  19   30.269  24.270  44.521 1.000 22.74
ANISOU  155  N   GLN  19   2724    3094    2822   -511  -123 4 2 3
ATOM    156  CA  GLN  19   29.806  23.113  43.730 1.000 23.85
ANISOU  156  CA  GLN  19   3129    2668    3263   148   63 8 9
ATOM    157  C   GLN  19   30.271  21.760  44.221 1.000 22.77
ANISOU  157  C   GLN  19   2532    3026    3095   -502  -574 7 7 8
ATOM    158  O   GLN  19   29.480  20.801  44.259 1.000 21.99
ANISOU  158  O   GLN  19   1869    2911    3574   -187  0  5 5 8
ATOM    159  CB  GLN  19   30.227  23.322  42.276 1.000 27.66
ANISOU  159  CB  GLN  19   5043    2519    2947   29 -339  4 5 8
ATOM    160  CG  GLN  19   29.397  24.333  41.523 1.000 26.21
ANISOU  160  CG  GLN  19   3289    3163    3508   299   171  4 3 7
ATOM    161  CD  GLN  19   27.917  24.368  41.862 1.000 32.47
ANISOU  161  CD  GLN  19   3403    4411    4521   -986  535  6 5 4
ATOM    162  OE1 GLN  19   27.154  23.604  41.277 1.000 39.69
ANISOU  162  OE1 GLN  19   3996    4238    6845   -262  -2770  1 8 2 9
ATOM    163  NE2 GLN  19   27.511  25.212  42.811 1.000 42.55
ANISOU  163  NE2 GLN  19   3803    6153    6212   81 1944  1 1
ATOM    164  N   ASP  20   31.526  21.572  44.631 1.000 22.63
ANISOU  164  N   ASP  20   2073    3400    3123   -414  95 7 0 8
ATOM    165  CA  ASP  20   31.926  20.292  45.225 1.000 23.10
ANISOU  165  CA  ASP  20   1869    3674    3235   83 236 7 0 4
ATOM    166  C   ASP  20   31.190  20.042  46.546 1.000 20.03
ANISOU  166  C   ASP  20   1775    2963    2873   -280  -143 4 9 3
ATOM    167  O   ASP  20   30.772  18.899  46.768 1.000 21.48
ANISOU  167  O   ASP  20   1429    2884    3848   -311  225  2 2 4
ATOM    168  CB  ASP  20   33.414  20.268  45.521 1.000 27.66
ANISOU  168  CB  ASP  20   1835    4546    4130   -16   207  8 8 1
ATOM    169  CG  ASP  20   34.298  20.206  44.291 1.000 39.35
ANISOU  169  CG  ASP  20   2355    6893    5705   -654  1323 -1 9 1 5
ATOM    170  OD1 ASP  20   33.870  19.914  43.153 1.000 35.78
ANISOU  170  OD1 ASP  20   3152    5452    4992   -741  1508 - 7 9 7
ATOM    171  OD2 ASP  20   35.508  20.433  44.467 1.000 45.22
ANISOU  171  OD2 ASP  20   2201    8705    6277   -589  1088 - 8 7
ATOM    172  N   GLU  21   31.046  21.053  47.404 1.000 20.01
ANISOU  172  N   GLU  21   1574    2935    3093   -412  -241 3 6 7
ATOM    173  CA  GLU  21   30.323  20.811  48.665 1.000 18.97
ANISOU  173  CA  GLU  21   1412    2956    2838   -481  -464 1 1 8
ATOM    174  C   GLU  21   28.858  20.448  48.402 1.000 17.84
ANISOU  174  C   GLU  21   1386    2342    3050   -307  -395 2 3 4
ATOM    175  O   GLU  21   28.290  19.602  49.054 1.000 18.46
ANISOU  175  O   GLU  21   1671    2286    3057   -419  -351 1 1 6
ATOM    176  CB  GLU  21   30.415  22.058  49.563 1.000 20.10
ANISOU  176  CB  GLU  21   1646    2821    3170   -514  -499 1 2 7
ATOM    177  CG  GLU  21   31.893  22.322  49.918 1.000 24.11
ANISOU  177  CG  GLU  21   1682    3568    3912   -766  -326 - 7 1 1
ATOM    178  CD  GLU  21   32.574  23.380  49.081 1.000 29.70
ANISOU  178  CD  GLU  21   1330    4241    5713   -752  -666 5 2 1
ATOM    179  OE1 GLU  21   32.249  23.594  47.887 1.000 35.14
ANISOU  179  OE1 GLU  21   2623    4054    6677   -1336 -1741  1 9 7 7
ATOM    180  OE2 GLU  21   33.483  24.007  49.678 1.000 39.39
ANISOU  180  OE2 GLU  21   3681    4425    6860   -2089 -1618  6 4 7
ATOM    181  N   PHE  22   28.231  21.048  47.395 1.000 17.30
ANISOU  181  N   PHE  22   1540    2352    2680   -243  -446 - 7 9
ATOM    182  CA  PHE  22   26.851  20.761  47.071 1.000 17.13
ANISOU  182  CA  PHE  22   1534    2166    2807   -235  -396 3 7 4
ATOM    183  C   PHE  22   26.733  19.329  46.552 1.000 17.41
ANISOU  183  C   PHE  22   1688    2500    2427   -502  -334 1 0 4
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ATOM    184  O   PHE  22   25.867  18.574  46.995 1.000 15.87
ANISOU  184  O   PHE  22   1570    2118    2343    -249  -361 131
ATOM    185  CB  PHE  22   26.305  21.840  46.149 1.000 18.00
ANISOU  185  CB  PHE  22   1747    2754    2337    70 -178  445
ATOM    186  CG  PHE  22   24.802  21.729  45.930 1.000 16.38
ANISOU  186  CG  PHE  22   1763    1748    2714    -90   -326 223
ATOM    187  CD1 PHE  22   23.934  21.723  47.003 1.000 18.29
ANISOU  187  CD1 PHE  22   1812    2091    3045    -197  -88  576
ATOM    188  CD2 PHE  22   24.290  21.720  44.641 1.000 18.62
ANISOU  188  CD2 PHE  22   2106    2079    2890    -143  -623 394
ATOM    189  CE1 PHE  22   22.569  21.727  46.771 1.000 18.90
ANISOU  189  CE1 PHE  22   1826    2086    3271    -198  -133 302
ATOM    190  CE2 PHE  22   22.911  21.660  44.379 1.000 19.28
ANISOU  190  CE2 PHE  22   2189    2023    3114    -242  -754 -144
ATOM    191  CZ  PHE  22   22.059  21.645  45.473 1.000 19.42
ANISOU  191  CZ  PHE  22   2048    1723    3607    90 -483  -376
ATOM    192  N   ARG  23   27.580  18.971  45.583 1.000 17.88
ANISOU  192  N   ARG  23   1647    2437    2709    -168  -218 317
ATOM    193  CA  ARG  23   27.520  17.594  45.079 1.000 19.18
ANISOU  193  CA  ARG  23   1724    2539    3022    -166  36 158
ATOM    194  C   ARG  23   27.767  16.595  46.211 1.000 19.11
ANISOU  194  C   ARG  23   1279    2461    3518    -173  -113 455
ATOM    195  O   ARG  23   27.107  15.547  46.229 1.000 18.82
ANISOU  195  O   ARG  23   1614    2156    3381    -33   181  -128
ATOM    196  CB  ARG  23   28.605  17.351  44.030 1.000 22.81
ANISOU  196  CB  ARG  23   1934    4099    2633    -34   -105 -354
ATOM    197  CG  ARG  23   28.248  17.790  42.617 1.000 24.82
ANISOU  197  CG  ARG  23   2601    4078    2752    191   -122 -204
ATOM    198  CD  ARG  23   29.376  17.272  41.685 1.000 29.71
ANISOU  198  CD  ARG  23   2503    5619    3168    -285  908  704
ATOM    199  NE  ARG  23   30.479  18.206  41.800 1.000 30.96
ANISOU  199  NE  ARG  23   2877    5034    3851    -43   286  297
ATOM    200  CZ  ARG  23   30.549  19.360  41.148 1.000 29.49
ANISOU  200  CZ  ARG  23   2612    5063    3529    -225  606  177
ATOM    201  NH1 ARG  23   29.536  19.665  40.328 1.000 29.26
ANISOU  201  NH1 ARG  23   3242    4951    2923    -960  331  525
ATOM    202  NH2 ARG  23   31.629  20.092  41.345 1.000 32.61
ANISOU  202  NH2 ARG  23   2320    5347    4722    -134  519  179
ATOM    203  N   ARG  24   28.708  16.851  47.125 1.000 17.80
ANISOU  203  N   ARG  24   1262    2168    3332    183   38 98
ATOM    204  CA  ARG  24   28.930  15.899  48.222 1.000 18.85
ANISOU  204  CA  ARG  24   1368    2509    3287    69 -162  105
ATOM    205  C   ARG  24   27.701  15.811  49.114 1.000 17.51
ANISOU  205  C   ARG  24   1456    2015    3181    132   -177 243
ATOM    206  O   ARG  24   27.333  14.733  49.544 1.000 17.93
ANISOU  206  O   ARG  24   1851    1965    2997    -16   -402 253
ATOM    207  CB  ARG  24   30.203  16.321  48.991 1.000 19.88
ANISOU  207  CB  ARG  24   1685    2700    3169    -398  -218 44
ATOM    208  CG  ARG  24   31.459  16.053  48.135 1.000 29.07
ANISOU  208  CG  ARG  24   1467    4625    4954    269   203  709
ATOM    209  CD  ARG  24   32.700  16.206  49.016 1.000 41.84
ANISOU  209  CD  ARG  24   1745    7021    7130    -451  -494 -922
ATOM    210  NE  ARG  24   33.690  17.103  48.464 1.000 57.06
ANISOU  210  NE  ARG  24   4362    9316    8003    -3326 -669 -1141
ATOM    211  CZ  ARG  24   34.032  18.327  48.810 1.000 60.67
ANISOU  211  CZ  ARG  24   5961    10369   6723    -4627 -1324  -1586
ATOM    212  NH1 ARG  24   33.430  18.980  49.799 1.000 49.70
ANISOU  212  NH1 ARG  24   7748    6565    4569    -951  -2185 2226
ATOM    213  NH2 ARG  24   34.997  18.971  48.159 1.000 54.12
ANISOU  213  NH2 ARG  24   8696    8490    3378    -3780 -2352  1607
ATOM    214  N   CYS  25   27.092  16.963  49.370 1.000 15.74
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ANISOU	214	N	CYS	25	1435	1969	2574	-16	-393	-33
ATOM	215	CA	CYS	25	25.884	16.921	50.223	1.000	16.39	
ANISOU	215	CA	CYS	25	1518	1954	2756	-95	-317	-300
ATOM	216	C	CYS	25	24.826	16.068	49.547	1.000	15.73	
ANISOU	216	C	CYS	25	1629	1699	2648	-114	-432	66
ATOM	217	O	CYS	25	24.124	15.262	50.155	1.000	15.89	
ANISOU	217	O	CYS	25	1453	1801	2783	-88	-469	252
ATOM	218	CB	CYS	25	25.367	18.362	50.424	1.000	15.93	
ANISOU	218	CB	CYS	25	1644	1779	2629	-49	-261	-30
ATOM	219	SG	CYS	25	23.700	18.417	51.184	1.000	17.82	
ANISOU	219	SG	CYS	25	1742	1825	3202	-122	-33	-55
ATOM	220	N	LEU	26	24.623	16.308	48.250	1.000	15.25	
ANISOU	220	N	LEU	26	1449	1843	2504	-54	-263	-142
ATOM	221	CA	LEU	26	23.560	15.590	47.534	1.000	15.62	
ANISOU	221	CA	LEU	26	1616	1739	2580	-86	-453	48
ATOM	222	C	LEU	26	23.763	14.085	47.621	1.000	15.18	
ANISOU	222	C	LEU	26	1697	1764	2306	-113	-479	6
ATOM	223	O	LEU	26	22.819	13.345	47.771	1.000	16.96	
ANISOU	223	O	LEU	26	1797	1725	2920	-234	-664	-300
ATOM	224	CB	LEU	26	23.526	16.068	46.066	1.000	16.02	
ANISOU	224	CB	LEU	26	1811	1645	2633	-191	-483	122
ATOM	225	CG	LEU	26	23.057	17.510	45.864	1.000	15.69	
ANISOU	225	CG	LEU	26	1762	1716	2485	-6	-15	7 9
ATOM	226	CD1	LEU	26	23.252	17.880	44.405	1.000	17.48	
ANISOU	226	CD1	LEU	26	1750	2360	2532	-17	-130	465
ATOM	227	CD2	LEU	26	21.584	17.680	46.290	1.000	17.11	
ANISOU	227	CD2	LEU	26	1655	2188	2660	-29	-75	168
ATOM	228	N	ARG	27	25.027	13.648	47.494	1.000	17.26	
ANISOU	228	N	ARG	27	1870	1818	2871	155	-326	140
ATOM	229	CA	ARG	27	25.295	12.205	47.372	1.000	18.75	
ANISOU	229	CA	ARG	27	2108	1845	3170	270	-955	102
ATOM	230	C	ARG	27	25.240	11.599	48.744	1.000	17.95	
ANISOU	230	C	ARG	27	1667	1801	3351	159	-897	219
ATOM	231	O	ARG	27	24.777	10.454	48.913	1.000	20.99	
ANISOU	231	O	ARG	27	2158	1793	4026	-43	-360	168
ATOM	232	CB	ARG	27	26.641	12.008	46.670	1.000	21.35	
ANISOU	232	CB	ARG	27	2815	2034	3264	622	-377	-129
ATOM	233	N	ASP	28	25.827	12.293	49.723	1.000	16.71	
ANISOU	233	N	ASP	28	1487	2004	2856	178	-328	6 7
ATOM	234	CA	ASP	28	26.034	11.672	51.026	1.000	17.47	
ANISOU	234	CA	ASP	28	1613	2095	2931	107	-301	127
ATOM	235	C	ASP	28	24.872	11.866	51.990	1.000	17.22	
ANISOU	235	C	ASP	28	1414	2264	2863	223	-447	471
ATOM	236	O	ASP	28	24.816	11.081	52.937	1.000	17.62	
ANISOU	236	O	ASP	28	1932	2139	2624	150	-565	327
ATOM	237	CB	ASP	28	27.306	12.237	51.657	1.000	22.17	
ANISOU	237	CB	ASP	28	1581	3894	2948	-272	-467	559
ATOM	238	CG	ASP	28	28.590	11.906	50.941	1.000	24.72	
ANISOU	238	CG	ASP	28	1596	3323	4472	236	-288	648
ATOM	239	OD1	ASP	28	28.572	10.905	50.199	1.000	27.56	
ANISOU	239	OD1	ASP	28	2317	3071	5084	808	-284	572
ATOM	240	OD2	ASP	28	29.573	12.617	51.251	1.000	32.08	
ANISOU	240	OD2	ASP	28	1584	4343	6261	-144	-470	416
ATOM	241	N	LYS	29	24.098	12.942	51.821	1.000	15.57	
ANISOU	241	N	LYS	29	1475	1814	2627	5	-303	178
ATOM	242	CA	LYS	29	23.048	13.305	52.778	1.000	15.13	
ANISOU	242	CA	LYS	29	1584	1999	2165	-68	-500	-96
ATOM	243	C	LYS	29	21.686	13.500	52.118	1.000	14.56	
ANISOU	243	C	LYS	29	1496	1352	2686	77	-452	106
ATOM	244	O	LYS	29	20.688	12.985	52.635	1.000	16.21	
ANISOU	244	O	LYS	29	1627	1876	2657	-177	-315	- 5

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ATOM    245  CB  LYS  29   23.431  14.563  53.574 1.000 16.09
ANISOU  245  CB  LYS  29    1666    1672    2777    3   -642   -25
ATOM    246  CG  LYS  29   24.776  14.421  54.292 1.000 17.68
ANISOU  246  CG  LYS  29    2192    1918    2606    7  -1144  141
ATOM    247  CD  LYS  29   25.161  15.647  55.096 1.000 20.71
ANISOU  247  CD  LYS  29    2675    2044    3151   -35  -1518  4  1
ATOM    248  CE  LYS  29   26.498  15.331  55.844 1.000 22.24
ANISOU  248  CE  LYS  29    2203    2714    3535   142  -1369  -685
ATOM    249  NZ  LYS  29   26.955  16.594  56.492 1.000 32.67
ANISOU  249  NZ  LYS  29    3199    3381    5831  -502  -2085 -1260
ATOM    250  N   GLY  30   21.604  14.198  50.993 1.000 14.09
ANISOU  250  N   GLY  30    1552    1461    2340   135  -455  -100
ATOM    251  CA  GLY  30   20.358  14.373  50.250 1.000 14.09
ANISOU  251  CA  GLY  30    1428    1561    2365    92  -342   -97
ATOM    252  C   GLY  30   19.372  15.284  50.955 1.000 12.30
ANISOU  252  C   GLY  30    1423    1192    2059   -95  -275  94
ATOM    253  O   GLY  30   18.168  15.223  50.696 1.000 14.58
ANISOU  253  O   GLY  30    1435    1689    2415   52  -476  -121
ATOM    254  N   LEU  31   19.884  16.146  51.823 1.000 13.93
ANISOU  254  N   LEU  31    1472    1479    2343  -182  -248  -181
ATOM    255  CA  LEU  31   19.012  17.114  52.511 1.000 14.44
ANISOU  255  CA  LEU  31    1534    1457    2495  -235   -55  -246
ATOM    256  C   LEU  31   19.894  18.286  52.942 1.000 15.08
ANISOU  256  C   LEU  31    1411    1535    2784  -177  -326  -314
ATOM    257  O   LEU  31   21.113  18.136  53.140 1.000 15.64
ANISOU  257  O   LEU  31    1468    1664    2812  -169  -328   -67
ATOM    258  CB  LEU  31   18.222  16.560  53.694 1.000 16.76
ANISOU  258  CB  LEU  31    2192    1664    2511  -367   128  -213
ATOM    259  CG  LEU  31   18.883  16.517  55.039 1.000 20.16
ANISOU  259  CG  LEU  31    2435    2485    2739  -289  -141  445
ATOM    260  CD1 LEU  31   17.977  16.145  56.202 1.000 26.49
ANISOU  260  CD1 LEU  31    2253    5076    2738  -508  -341  969
ATOM    261  CD2 LEU  31   20.052  15.526  55.032 1.000 24.73
ANISOU  261  CD2 LEU  31    4192    2967    2237  1001   153   610
ATOM    262  N   PHE  32   19.289  19.462  53.052 1.000 14.11
ANISOU  262  N   PHE  32    1569    1457    2335  -231  -179  -207
ATOM    263  CA  PHE  32   20.020  20.697  53.417 1.000 13.56
ANISOU  263  CA  PHE  32    1447    1389    2317  -225  -137  1  4
ATOM    264  C   PHE  32   18.976  21.777  53.687 1.000 13.72
ANISOU  264  C   PHE  32    1411    1439    2365  -218  -421  -142
ATOM    265  O   PHE  32   17.889  21.711  53.118 1.000 15.50
ANISOU  265  O   PHE  32    1392    1862    2634  -175  -436  -389
ATOM    266  CB  PHE  32   20.958  21.157  52.308 1.000 15.01
ANISOU  266  CB  PHE  32    1379    2201    2125  -305  -342  231
ATOM    267  CG  PHE  32   20.381  21.156  50.920 1.000 14.60
ANISOU  267  CG  PHE  32    1649    1662    2237  -193  -429  118
ATOM    268  CD1 PHE  32   20.326  19.986  50.148 1.000 14.53
ANISOU  268  CD1 PHE  32    1328    1688    2504  -156  -507  1  5
ATOM    269  CD2 PHE  32   19.831  22.345  50.396 1.000 13.66
ANISOU  269  CD2 PHE  32    1320    1678    2191  -179  -309  166
ATOM    270  CE1 PHE  32   19.742  20.033  48.892 1.000 14.26
ANISOU  270  CE1 PHE  32    1507    1655    2256  -346  -271  199
ATOM    271  CE2 PHE  32   19.267  22.348  49.138 1.000 15.49
ANISOU  271  CE2 PHE  32    1681    1932    2272   72  -504  -126
ATOM    272  CZ  PHE  32   19.177  21.184  48.385 1.000 15.25
ANISOU  272  CZ  PHE  32    1979    1700    2117  -185  -295  168
ATOM    273  N   TYR  33   19.376  22.785  54.442 1.000 14.44
ANISOU  273  N   TYR  33    1813    1302    2372  -237  -496   -50
ATOM    274  CA  TYR  33   18.616  24.023  54.519 1.000 14.32
ANISOU  274  CA  TYR  33    1764    1415    2261  -143  -295  -111
ATOM    275  C   TYR  33   19.039  24.929  53.364 1.000 13.70
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ANISOU	275	C	TYR	33	1479	1565	2161	-79	-459	- 5
ATOM	276	O	TYR	33	20.158	24.871	52.859	1.000	15.28	
ANISOU	276	O	TYR	33	1370	1524	2912	-190	-420	2 6 3
ATOM	277	CB	TYR	33	18.874	24.734	55.853	1.000	14.47	
ANISOU	277	CB	TYR	33	1648	1717	2133	-197	-309	- 1 3 1
ATOM	278	CG	TYR	33	18.231	24.046	57.049	1.000	15.71	
ANISOU	278	CG	TYR	33	2131	1537	2302	-339	-109	- 1 3 6
ATOM	279	CD1	TYR	33	16.938	24.390	57.453	1.000	17.41	
ANISOU	279	CD1	TYR	33	2478	1967	2172	-154	246	- 2 4 9
ATOM	280	CD2	TYR	33	18.912	23.116	57.799	1.000	19.58	
ANISOU	280	CD2	TYR	33	2901	2070	2468	144	115	1 9 2
ATOM	281	CE1	TYR	33	16.354	23.758	58.542	1.000	20.18	
ANISOU	281	CE1	TYR	33	3138	1948	2581	26	740	- 1 0 2
ATOM	282	CE2	TYR	33	18.368	22.475	58.900	1.000	21.50	
ANISOU	282	CE2	TYR	33	3571	2480	2118	340	196	1 2 2
ATOM	283	CZ	TYR	33	17.081	22.821	59.263	1.000	22.02	
ANISOU	283	CZ	TYR	33	4140	1772	2454	471	1035	- 1 0 5
ATOM	284	OH	TYR	33	16.541	22.194	60.355	1.000	29.55	
ANISOU	284	OH	TYR	33	5088	2809	3329	377	1512	7 2 8
ATOM	285	N	LEU	34	18.076	25.709	52.878	1.000	14.28	
ANISOU	285	N	LEU	34	1496	1533	2396	-80	-517	- 1 7
ATOM	286	CA	LEU	34	18.278	26.620	51.756	1.000	15.02	
ANISOU	286	CA	LEU	34	1830	1452	2425	-126	-580	2 0
ATOM	287	C	LEU	34	17.871	28.039	52.151	1.000	14.46	
ANISOU	287	C	LEU	34	1703	1575	2217	-146	-241	- 7
ATOM	288	O	LEU	34	16.716	28.289	52.492	1.000	16.95	
ANISOU	288	O	LEU	34	1663	1852	2923	-75	-186	- 6 4
ATOM	289	CB	LEU	34	17.389	26.127	50.598	1.000	16.54	
ANISOU	289	CB	LEU	34	2355	1485	2444	-212	-749	2 5
ATOM	290	CG	LEU	34	17.633	26.800	49.249	1.000	15.65	
ANISOU	290	CG	LEU	34	2010	1567	2371	-7	-633	- 6 3
ATOM	291	CD1	LEU	34	18.977	26.422	48.664	1.000	20.14	
ANISOU	291	CD1	LEU	34	1919	2018	3717	-225	-171	2 6 0
ATOM	292	CD2	LEU	34	16.490	26.535	48.291	1.000	17.29	
ANISOU	292	CD2	LEU	34	2152	1824	2592	-425	-819	2 1 4
ATOM	293	N	THR	35	18.842	28.944	52.065	1.000	15.48	
ANISOU	293	N	THR	35	1817	1532	2534	-230	-200	1 3
ATOM	294	CA	THR	35	18.587	30.362	52.324	1.000	17.02	
ANISOU	294	CA	THR	35	2149	1537	2781	-206	-827	- 1 9 6
ATOM	295	C	THR	35	18.491	31.127	51.010	1.000	17.04	
ANISOU	295	C	THR	35	1895	1693	2887	-149	-882	- 4 4
ATOM	296	O	THR	35	18.765	30.572	49.938	1.000	17.01	
ANISOU	296	O	THR	35	1880	1692	2893	-262	-458	1 4 4
ATOM	297	CB	THR	35	19.772	30.917	53.180	1.000	17.79	
ANISOU	297	CB	THR	35	2018	1942	2800	-87	-854	- 2 0 0
ATOM	298	OG1	THR	35	20.986	30.673	52.474	1.000	21.10	
ANISOU	298	OG1	THR	35	2110	2035	3873	-253	-364	- 4 0 2
ATOM	299	CG2	THR	35	19.847	30.331	54.567	1.000	20.44	
ANISOU	299	CG2	THR	35	2600	2194	2971	228	-1113	5 9
ATOM	300	N	ASP	36	18.186	32.407	51.059	1.000	18.62	
ANISOU	300	N	ASP	36	2287	1747	3040	-187	-316	1 4 9
ATOM	301	CA	ASP	36	18.240	33.300	49.884	1.000	20.75	
ANISOU	301	CA	ASP	36	2678	1722	3483	-632	-508	3 7 4
ATOM	302	C	ASP	36	17.474	32.711	48.703	1.000	20.05	
ANISOU	302	C	ASP	36	2104	1929	3586	198	-928	4 8 9
ATOM	303	O	ASP	36	17.929	32.685	47.540	1.000	21.06	
ANISOU	303	O	ASP	36	2593	1749	3662	-496	-756	1 3 1
ATOM	304	CB	ASP	36	19.703	33.561	49.500	1.000	22.21	
ANISOU	304	CB	ASP	36	2666	2366	3406	-876	-755	8 0 7
ATOM	305	CG	ASP	36	20.588	34.192	50.551	1.000	23.05	
ANISOU	305	CG	ASP	36	2537	1818	4402	-175	-833	- 2 0 8

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ATOM    306  OD1 ASP  36   20.061  34.886  51.457  1.000 26.16
ANISOU  306  OD1 ASP  36    2981    2100    4860     378    -777   -381
ATOM    307  OD2 ASP  36   21.824  33.982  50.528  1.000 24.87
ANISOU  307  OD2 ASP  36    2532    1994    4924     -49    -950   -628
ATOM    308  N   CYS  37   16.282  32.196  48.971  1.000 20.25
ANISOU  308  N   CYS  37    2135    1711    3849     118    -638   -263
ATOM    309  CA  CYS  37   15.463  31.587  47.902  1.000 20.28
ANISOU  309  CA  CYS  37    2390    1478    3839     136    -799   -138
ATOM    310  C   CYS  37   14.078  32.183  47.818  1.000 19.90
ANISOU  310  C   CYS  37    2374    1724    3463     214    -711    -74
ATOM    311  O   CYS  37   13.176  31.629  47.156  1.000 22.75
ANISOU  311  O   CYS  37    2569    1984    4091     -12   -1108    15
ATOM    312  CB  CYS  37   15.359  30.061  48.083  1.000 22.21
ANISOU  312  CB  CYS  37    2739    1454    4247     194    -477   -115
ATOM    313  SG  CYS  37   14.500  29.595  49.596  1.000 22.84
ANISOU  313  SG  CYS  37    2854    1884    3942    -203    -922    141
ATOM    314  N   GLY  38   13.855  33.390  48.314  1.000 20.85
ANISOU  314  N   GLY  38    2353    1638    3933     217    -375    -42
ATOM    315  CA  GLY  38   12.570  34.044  48.194  1.000 23.42
ANISOU  315  CA  GLY  38    2233    1874    4790     255    -292    165
ATOM    316  C   GLY  38   11.534  33.619  49.217  1.000 23.29
ANISOU  316  C   GLY  38    2577    2045    4228     113    -136   -601
ATOM    317  O   GLY  38   10.400  34.091  49.129  1.000 25.58
ANISOU  317  O   GLY  38    2529    3424    3765     214     -96   -264
ATOM    318  N   LEU  39   11.894  32.836  50.237  1.000 24.55
ANISOU  318  N   LEU  39    2310    2980    4037     119     -46   -364
ATOM    319  CA  LEU  39   10.938  32.331  51.195  1.000 24.44
ANISOU  319  CA  LEU  39    2637    2964    3684    -105     175   -946
ATOM    320  C   LEU  39   11.107  32.885  52.593  1.000 35.41
ANISOU  320  C   LEU  39    5341    4215    3898    -796     165   -1435
ATOM    321  O   LEU  39   11.784  32.313  53.441  1.000 43.41
ANISOU  321  O   LEU  39    7338    4986    4171   -2639   -1333   -303
ATOM    322  CB  LEU  39   10.850  30.810  51.206  1.000 26.48
ANISOU  322  CB  LEU  39    4244    2940    2879      49     -70   -261
ATOM    323  CG  LEU  39   10.404  30.097  49.921  1.000 30.21
ANISOU  323  CG  LEU  39    4834    2452    4195     258   -1618   -474
ATOM    324  CD1 LEU  39   10.683  28.595  49.972  1.000 24.78
ANISOU  324  CD1 LEU  39    3351    2597    3468     424    -707   -118
ATOM    325  CD2 LEU  39    8.940  30.407  49.640  1.000 27.50
ANISOU  325  CD2 LEU  39    4828    2118    3503     860    -860   -323
ATOM    326  N   THR  40   10.365  33.957  52.882  1.000 45.58
ANISOU  326  N   THR  40    7392    4849    5077    -520   2852  -1993
ATOM    327  CA  THR  40   10.610  34.661  54.136  1.000 32.50
ANISOU  327  CA  THR  40    4224    3732    4393     999    961   -558
ATOM    328  C   THR  40    9.700  34.177  55.248  1.000 29.68
ANISOU  328  C   THR  40    3175    4204    3898    -116    294  -1630
ATOM    329  O   THR  40    8.653  33.556  55.031  1.000 39.75
ANISOU  329  O   THR  40    3930    5847    5326   -1079   -301  -1653
ATOM    330  CB  THR  40   10.641  36.183  53.997  1.000 56.31
ANISOU  330  CB  THR  40   10586    3758    7052   -1417   1006   -992
ATOM    331  OG1 THR  40   11.545  36.606  52.946  1.000 68.39
ANISOU  331  OG1 THR  40    7379    3900   14707   -1978   3617   -246
ATOM    332  CG2 THR  40   11.214  36.837  55.256  1.000 70.22
ANISOU  332  CG2 THR  40    8265    5228   13188    1389  -4422  -3241
ATOM    333  N   ASP  41   10.191  34.302  56.486  1.000 33.20
ANISOU  333  N   ASP  41    3580    5223    3810    -203    307   -1779
ATOM    334  CA  ASP  41    9.329  33.943  57.613  1.000 27.51
ANISOU  334  CA  ASP  41    2705    3858    3891     91   -253   -1061
ATOM    335  C   ASP  41    8.107  34.861  57.660  1.000 33.43
ANISOU  335  C   ASP  41    3131    3064    6508     32  547  -1307
ATOM    336  O   ASP  41    7.034  34.469  58.101  1.000 30.76
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ANISOU	336	O	ASP	41	2690	3223	5774	141	-149	-969	
ATOM	337	CB	ASP	41	10.113	34.135	58.915	1.000	33.51		
ANISOU	337	CB	ASP	41	4853	4026	3852	-1222	-698	-938	
ATOM	338	CG	ASP	41	9.453	33.351	60.039	1.000	33.37		
ANISOU	338	CG	ASP	41	3324	5291	4065	-739	-501	-571	
ATOM	339	OD1	ASP	41	9.152	32.164	59.780	1.000	34.95		
ANISOU	339	OD1	ASP	41	4040	4681	4557	-380	824	-92	
ATOM	340	OD2	ASP	41	9.395	33.904	61.161	1.000	86.76		
ANISOU	340	OD2	ASP	41	18972	10427	3567	-10425	588	-1858	
ATOM	341	N	THR	42	8.272	36.089	57.205	1.000	32.71		
ANISOU	341	N	THR	42	3217	3695	5516	9	-58	-586	
ATOM	342	CA	THR	42	7.198	37.074	57.221	1.000	38.48		
ANISOU	342	CA	THR	42	4747	4161	5711	1067	-861	-630	
ATOM	343	C	THR	42	6.005	36.640	56.375	1.000	35.83		
ANISOU	343	C	THR	42	3333	4044	6237	1136	157	-1162	
ATOM	344	O	THR	42	4.877	36.606	56.900	1.000	38.90		
ANISOU	344	O	THR	42	4048	3603	7128	1186	1059	1224	
ATOM	345	CB	THR	42	7.751	38.449	56.815	1.000	37.05		
ANISOU	345	CB	THR	42	4526	3763	5788	1021	-677	-1532	
ATOM	346	OG1	THR	42	8.831	38.301	55.889	1.000	98.08		
ANISOU	346	OG1	THR	42	16381	13757	7127	-3208	7500	-2318	
ATOM	347	CG2	THR	42	8.358	39.113	58.047	1.000	36.08		
ANISOU	347	CG2	THR	42	6097	3613	3997	886	-1119	269	
ATOM	348	N	GLU	43	6.259	36.184	55.173	1.000	34.64		
ANISOU	348	N	GLU	43	4208	3312	5642	656	-275	-698	
ATOM	349	CA	GLU	43	5.391	35.557	54.192	1.000	32.98		
ANISOU	349	CA	GLU	43	3527	2886	6120	1199	-883	-152	
ATOM	350	C	GLU	43	4.701	34.300	54.713	1.000	41.67		
ANISOU	350	C	GLU	43	3454	4151	8229	225	-1743	953	
ATOM	351	O	GLU	43	3.484	34.124	54.605	1.000	38.53		
ANISOU	351	O	GLU	43	3375	4041	7222	589	-1417	-578	
ATOM	352	CB	GLU	43	6.278	35.074	53.026	1.000	44.72		
ANISOU	352	CB	GLU	43	5991	4098	6901	28	137	-2137	
ATOM	353	CG	GLU	43	6.658	36.125	52.003	1.000	53.42		
ANISOU	353	CG	GLU	43	5931	6417	7949	-993	1540	-1338	
ATOM	354	CD	GLU	43	7.838	36.976	52.429	1.000	50.41		
ANISOU	354	CD	GLU	43	4087	7601	7467	-439	2486	-1725	
ATOM	355	OE1	GLU	43	8.024	37.112	53.661	1.000	59.44		
ANISOU	355	OE1	GLU	43	7237	7592	7757	-1284	1632	-2146	
ATOM	356	OE2	GLU	43	8.555	37.476	51.531	1.000	71.33		
ANISOU	356	OE2	GLU	43	11550	6344	9207	-4131	6267	-4645	
ATOM	357	N	LEU	44	5.511	33.373	55.224	1.000	27.80		
ANISOU	357	N	LEU	44	2837	2924	4802	-55	-626	-227	
ATOM	358	CA	LEU	44	4.926	32.222	55.902	1.000	27.88		
ANISOU	358	CA	LEU	44	2207	3379	5009	241	813	-382	
ATOM	359	C	LEU	44	3.886	32.670	56.934	1.000	34.30		
ANISOU	359	C	LEU	44	1930	4771	6333	-537	776	-2629	
ATOM	360	O	LEU	44	2.781	32.159	56.924	1.000	33.35		
ANISOU	360	O	LEU	44	2046	5235	5390	-840	705	-2397	
ATOM	361	CB	LEU	44	5.999	31.394	56.587	1.000	24.59		
ANISOU	361	CB	LEU	44	2781	3494	3070	81	940	-74	
ATOM	362	CG	LEU	44	5.592	30.147	57.343	1.000	31.76		
ANISOU	362	CG	LEU	44	2414	5135	4517	-845	792	1217	
ATOM	363	CD1	LEU	44	4.563	29.328	56.575	1.000	47.71		
ANISOU	363	CD1	LEU	44	5860	7081	5188	-3576	3333	-2541	
ATOM	364	CD2	LEU	44	6.793	29.259	57.653	1.000	51.56		
ANISOU	364	CD2	LEU	44	6294	3688	9608	1956	2240	1382	
ATOM	365	N	LYS	45	4.212	33.712	57.694	1.000	41.91		
ANISOU	365	N	LYS	45	2865	6802	6256	-1455	381	-3537	
ATOM	366	CA	LYS	45	3.369	34.195	58.773	1.000	44.31		
ANISOU	366	CA	LYS	45	4768	5427	6639	74	837	-2985	

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ATOM    367  C   LYS  45   1.981  34.582  58.278 1.000 38.58
ANISOU  367  C   LYS  45   4535   3445    6681   -245  1221 -2820
ATOM    368  O   LYS  45   0.984  34.238  58.902 1.000 39.93
ANISOU  368  O   LYS  45   4857   3594    6720    262  1634 -2337
ATOM    369  CB  LYS  45   4.038  35.400  59.447 1.000 50.20
ANISOU  369  CB  LYS  45   4944   5561    8569   1081  -447 -3980
ATOM    370  CG  LYS  45   3.082  36.546  59.706 1.000 53.07
ANISOU  370  CG  LYS  45   3548   6321   10296   1148 -2094 -4809
ATOM    371  CD  LYS  45   3.714  37.922  59.622 1.000 58.29
ANISOU  371  CD  LYS  45   4723   5694   11730   1422 -3745 -5024
ATOM    372  CE  LYS  45   3.199  38.793  60.761 1.000 65.33
ANISOU  372  CE  LYS  45   6294   6898   11629   1072 -3430 -5603
ATOM    373  NZ  LYS  45   1.713  38.779  60.852 1.000 73.75
ANISOU  373  NZ  LYS  45   6392   9216   12412   -718 -1071 -7436
ATOM    374  N   SER  46   1.973  35.341  57.193 1.000 36.94
ANISOU  374  N   SER  46   4074   3478    6484   -956  1068 -2939
ATOM    375  CA  SER  46   0.743  35.856  56.607 1.000 37.61
ANISOU  375  CA  SER  46   3983   3417    6892  -1335  988 -2335
ATOM    376  C   SER  46  -0.137  34.702  56.137 1.000 34.45
ANISOU  376  C   SER  46   3430   3057    6602  -1104 1656 -2394
ATOM    377  O   SER  46  -1.337  34.625  56.449 1.000 29.50
ANISOU  377  O   SER  46   3195   2789    5224   -587  1093 -1206
ATOM    378  CB  SER  46   1.160  36.726  55.419 1.000 40.36
ANISOU  378  CB  SER  46   4102   3809    7425  -2099  617 -1930
ATOM    379  OG  SER  46   0.018  37.017  54.630 1.000 43.38
ANISOU  379  OG  SER  46   5005   3431    8048  -1261   53 -1863
ATOM    380  N   ALA  47   0.493  33.808  55.361 1.000 29.82
ANISOU  380  N   ALA  47   3246   2173    5910   -18   809 -1228
ATOM    381  CA  ALA  47  -0.208  32.623  54.879 1.000 25.84
ANISOU  381  CA  ALA  47   3566   2106    4148    7  630 -891
ATOM    382  C   ALA  47  -0.722  31.792  56.058 1.000 25.02
ANISOU  382  C   ALA  47   2591   2344    4572   481   280 -280
ATOM    383  O   ALA  47  -1.888  31.381  56.063 1.000 23.19
ANISOU  383  O   ALA  47   2850   2366    3597   129   318 -1119
ATOM    384  CB  ALA  47   0.615  31.791  53.912 1.000 26.76
ANISOU  384  CB  ALA  47   2892   2764    4511   270   351 -1134
ATOM    385  N   LYS  48   0.132  31.529  57.041 1.000 24.64
ANISOU  385  N   LYS  48   3107   2076    4178   130   -57 -1085
ATOM    386  CA  LYS  48  -0.186  30.712  58.202 1.000 25.83
ANISOU  386  CA  LYS  48   3545   2979    3291   -16   30 -1416
ATOM    387  C   LYS  48  -1.337  31.339  59.003 1.000 28.58
ANISOU  387  C   LYS  48   3373   3344    4144   -354  129 -2041
ATOM    388  O   LYS  48  -2.310  30.694  59.396 1.000 27.04
ANISOU  388  O   LYS  48   3849   2793    3633   312   419 -634
ATOM    389  CB  LYS  48   1.035  30.654  59.149 1.000 28.95
ANISOU  389  CB  LYS  48   3507   3294    4200   -274  -257 -738
ATOM    390  CG  LYS  48   0.775  29.694  60.313 1.000 32.96
ANISOU  390  CG  LYS  48   4412   3214    4897   113   -543 -156
ATOM    391  CD  LYS  48   1.418  30.222  61.570 1.000 39.92
ANISOU  391  CD  LYS  48   5828   4616    4724   705  -1278  -39
ATOM    392  CE  LYS  48   1.217  29.320  62.769 1.000 33.67
ANISOU  392  CE  LYS  48   3973   4020    4799  1402  -205 -356
ATOM    393  NZ  LYS  48   0.731  30.100  63.946 1.000 38.33
ANISOU  393  NZ  LYS  48   4516   5230    4816   916 -1039 -1555
ATOM    394  N   ASP  49  -1.253  32.656  59.255 1.000 23.78
ANISOU  394  N   ASP  49   2796   3136    3104    79  -459 -1588
ATOM    395  CA  ASP  49  -2.298  33.326  60.006 1.000 24.05
ANISOU  395  CA  ASP  49   2826   2913    3398  -291   366 -1043
ATOM    396  C   ASP  49  -3.679  33.181  59.366 1.000 24.45
ANISOU  396  C   ASP  49   2721   3270    3300  -220   555 -1454
ATOM    397  O   ASP  49  -4.637  32.951  60.082 1.000 27.10
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ANISOU  397  O   ASP  49   2863   3177   4257   -368   1004  -1544
ATOM    398  CB  ASP  49   -2.034  34.824  60.167  1.000  30.34
ANISOU  398  CB  ASP  49   3695   3210   4623   -559    713  -2178
ATOM    399  CG  ASP  49   -0.924  35.181  61.128  1.000  37.18
ANISOU  399  CG  ASP  49   5259   4057   4810  -1109   -211  -2007
ATOM    400  OD1 ASP  49   -0.556  34.266  61.904  1.000  33.36
ANISOU  400  OD1 ASP  49   3717   4549   4408   -737    888  -1727
ATOM    401  OD2 ASP  49   -0.525  36.375  61.087  1.000  48.45
ANISOU  401  OD2 ASP  49   7960   3575   6875   -927  -2887  -2409
ATOM    402  N   LEU  50   -3.788  33.402  58.059  1.000  24.46
ANISOU  402  N   LEU  50   3114   2668   3513    374    200  -1298
ATOM    403  CA  LEU  50   -5.123  33.344  57.471  1.000  22.92
ANISOU  403  CA  LEU  50   2949   2145   3614    161    397   -562
ATOM    404  C   LEU  50   -5.679  31.937  57.328  1.000  21.79
ANISOU  404  C   LEU  50   3345   2197   2737     33    417   -556
ATOM    405  O   LEU  50   -6.878  31.741  57.475  1.000  24.96
ANISOU  405  O   LEU  50   3463   2502   3517   -276    766  -1181
ATOM    406  CB  LEU  50   -5.254  34.137  56.194  1.000  22.13
ANISOU  406  CB  LEU  50   3127   2016   3266   -103    524   -757
ATOM    407  CG  LEU  50   -6.661  34.578  55.807  1.000  28.87
ANISOU  407  CG  LEU  50   3549   3538   3881    961    825    208
ATOM    408  CD1 LEU  50   -7.389  35.082  57.049  1.000  52.72
ANISOU  408  CD1 LEU  50   4567   8556   6907    940   2929  -1936
ATOM    409  CD2 LEU  50   -6.644  35.642  54.723  1.000  41.07
ANISOU  409  CD2 LEU  50   6971   3395   5240  -1005  -2258    857
ATOM    410  N   VAL  51   -4.801  30.956  57.138  1.000  21.78
ANISOU  410  N   VAL  51   3345   2052   2877   -160    216   -860
ATOM    411  CA  VAL  51   -5.293  29.580  57.118  1.000  19.40
ANISOU  411  CA  VAL  51   2631   2056   2683    -12    173   -303
ATOM    412  C   VAL  51   -5.631  29.135  58.533  1.000  25.25
ANISOU  412  C   VAL  51   4453   2656   2485   -753    587   -955
ATOM    413  O   VAL  51   -6.652  28.454  58.725  1.000  25.07
ANISOU  413  O   VAL  51   4555   2176   2795   -484   1185   -827
ATOM    414  CB  VAL  51   -4.377  28.589  56.396  1.000  18.78
ANISOU  414  CB  VAL  51   2729   1786   2620    -72    171   -313
ATOM    415  CG1 VAL  51   -3.152  28.238  57.231  1.000  20.42
ANISOU  415  CG1 VAL  51   3002   1841   2918    295    -13   -480
ATOM    416  CG2 VAL  51   -5.147  27.306  56.021  1.000  24.10
ANISOU  416  CG2 VAL  51   3112   2337   3708   -511    355   -846
ATOM    417  N   ILE  52   -4.836  29.500  59.534  1.000  25.23
ANISOU  417  N   ILE  52   4514   2471   2603    388    76   -874
ATOM    418  CA  ILE  52   -5.205  29.114  60.921  1.000  24.38
ANISOU  418  CA  ILE  52   3488   3010   2765    248    19   -509
ATOM    419  C   ILE  52   -6.498  29.771  61.355  1.000  24.20
ANISOU  419  C   ILE  52   3026   2482   3687   -354    114   -648
ATOM    420  O   ILE  52   -7.328  29.182  62.071  1.000  27.73
ANISOU  420  O   ILE  52   3735   2812   3989   -198    614   -334
ATOM    421  CB  ILE  52   -4.016  29.427  61.829  1.000  27.59
ANISOU  421  CB  ILE  52   4347   2815    590      0   -785
ATOM    422  CG1 ILE  52   -2.853  28.439  61.510  1.000  31.45
ANISOU  422  CG1 ILE  52   5248   3425    741    363  -1288
ATOM    423  CG2 ILE  52   -4.293  29.312  63.317  1.000  33.62
ANISOU  423  CG2 ILE  52   6199   2750    881    150  -1454
ATOM    424  CD1 ILE  52   -1.930  28.351  62.710  1.000  36.22
ANISOU  424  CD1 ILE  52   5082   4722    979   -601  -234
ATOM    425  N   ASP  53   -6.771  30.992  60.913  1.000  24.56
ANISOU  425  N   ASP  53   2878   2974    165    609  -426
ATOM    426  CA  ASP  53   -8.051  31.646  61.278  1.000  23.50
ANISOU  426  CA  ASP  53   2942   2745   -5 355  -677
ATOM    427  C   ASP  53   -9.201  30.929  60.594  1.000  26.34
ANISOU  427  C   ASP  53   2986   3462   3561   -435    612  -1064
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ATOM    428  O   ASP  53    -10.342  30.836  61.051 1.000 29.73
ANISOU  428  O   ASP  53     3468    3085     4743   -436   937  -1142
ATOM    429  CB  ASP  53     -7.964  33.084  60.772 1.000 33.83
ANISOU  429  CB  ASP  53     3800    2322     6730   -92   1806  -933
ATOM    430  CG  ASP  53     -9.308  33.758  60.583 1.000 32.05
ANISOU  430  CG  ASP  53     4652    2412     5113   172   -302  -1138
ATOM    431  OD1 ASP  53     -9.653  34.524  61.486 1.000 43.68
ANISOU  431  OD1 ASP  53     3661    4686     8248   150   1379  -3120
ATOM    432  OD2 ASP  53     -9.950  33.556  59.532 1.000 51.30
ANISOU  432  OD2 ASP  53     8386    6074     5033   -2062  -1738  922
ATOM    433  N   PHE  54     -8.933  30.376  59.413 1.000 25.39
ANISOU  433  N   PHE  54     3372    2640     3637   72  71  -1176
ATOM    434  CA  PHE  54     -9.917  29.557  58.704 1.000 24.10
ANISOU  434  CA  PHE  54     3015    3264     2876   -366   263   -539
ATOM    435  C   PHE  54    -10.180  28.259  59.456 1.000 24.00
ANISOU  435  C   PHE  54     3264    3174     2680   -365   459   -688
ATOM    436  O   PHE  54    -11.333  27.893  59.686 1.000 28.19
ANISOU  436  O   PHE  54     3551    3246     3914   -549   1305  -1130
ATOM    437  CB  PHE  54     -9.465  29.273  57.263 1.000 23.62
ANISOU  437  CB  PHE  54     3241    2955     2779   -249   218   -434
ATOM    438  CG  PHE  54    -10.522  28.499  56.461 1.000 27.62
ANISOU  438  CG  PHE  54     4712    2945     2838   -694   -636  1  4
ATOM    439  CD1 PHE  54    -11.729  29.078  56.087 1.000 31.38
ANISOU  439  CD1 PHE  54     3613    4658     3654   -951   -262  -621
ATOM    440  CD2 PHE  54    -10.283  27.210  56.033 1.000 30.92
ANISOU  440  CD2 PHE  54     5782    3589     2377   -831   293   -844
ATOM    441  CE1 PHE  54    -12.653  28.406  55.307 1.000 44.29
ANISOU  441  CE1 PHE  54     5504    5404     5919   -3066  -2057  1178
ATOM    442  CE2 PHE  54    -11.228  26.503  55.306 1.000 38.69
ANISOU  442  CE2 PHE  54     7997    4412     2289   -2803  155   -387
ATOM    443  CZ  PHE  54    -12.424  27.092  54.927 1.000 42.33
ANISOU  443  CZ  PHE  54     5992    6305     3787   -4256  54  -446
ATOM    444  N   PHE  55     -9.126  27.558  59.870 1.000 25.87
ANISOU  444  N   PHE  55     3787    2768     3276   -85   431   -839
ATOM    445  CA  PHE  55     -9.195  26.310  60.625 1.000 25.69
ANISOU  445  CA  PHE  55     3567    3042     3151   68  763  -711
ATOM    446  C   PHE  55     -9.929  26.484  61.944 1.000 27.69
ANISOU  446  C   PHE  55     3357    3961     3205   181   703   -719
ATOM    447  O   PHE  55    -10.745  25.670  62.373 1.000 30.08
ANISOU  447  O   PHE  55     4046    4165     3217   142   878   -127
ATOM    448  CB  PHE  55     -7.759  25.873  60.932 1.000 25.48
ANISOU  448  CB  PHE  55     3556    3159     2964   117   835   -638
ATOM    449  CG  PHE  55     -7.019  25.242  59.762 1.000 26.31
ANISOU  449  CG  PHE  55     3437    3039     3522   -468  1068  -1156
ATOM    450  CD1 PHE  55     -7.611  24.820  58.590 1.000 27.09
ANISOU  450  CD1 PHE  55     3553    3895     2845   -1018  1404  -658
ATOM    451  CD2 PHE  55     -5.651  25.031  59.935 1.000 31.68
ANISOU  451  CD2 PHE  55     3244    4185     4609   -726  1123  -2221
ATOM    452  CE1 PHE  55     -6.878  24.150  57.621 1.000 23.89
ANISOU  452  CE1 PHE  55     3472    2525     3079   -58   551   -547
ATOM    453  CE2 PHE  55     -4.904  24.433  58.950 1.000 31.74
ANISOU  453  CE2 PHE  55     3487    4387     4186   226   337  -2304
ATOM    454  CZ  PHE  55     -5.514  24.004  57.770 1.000 24.23
ANISOU  454  CZ  PHE  55     3706    2187     3312   414   -22   -416
ATOM    455  N   GLU  56     -9.633  27.581  62.629 1.000 30.39
ANISOU  455  N   GLU  56     3961    5033     2553   -308   520  -1110
ATOM    456  CA  GLU  56    -10.222  27.875  63.925 1.000 30.18
ANISOU  456  CA  GLU  56     4160    4504     2805   -734  1221  -637
ATOM    457  C   GLU  56    -11.650  28.401  63.820 1.000 33.50
ANISOU  457  C   GLU  56     4324    4124     4280   -535  1489  -892
ATOM    458  O   GLU  56    -12.470  28.149  64.708 1.000 44.44
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ANISOU  458  O   GLU  56   3864    8872    4150   93 1013  1011
ATOM    459  CB  GLU  56   -9.403  28.978  64.615 1.000 35.85
ANISOU  459  CB  GLU  56   5037    5109    3475   -221  574  -1821
ATOM    460  CG  GLU  56   -8.192  28.508  65.401 1.000 38.63
ANISOU  460  CG  GLU  56   4804    7152    2721   -337  763  -1692
ATOM    461  CD  GLU  56   -7.395  29.699  65.916 1.000 45.55
ANISOU  461  CD  GLU  56   5576    7183    4546   -24   -295 -2330
ATOM    462  OE1 GLU  56   -7.935  30.828  65.888 1.000 55.54
ANISOU  462  OE1 GLU  56   7344    7247    6512   586   2570 -3059
ATOM    463  OE2 GLU  56   -6.246  29.492  66.350 1.000 50.41
ANISOU  463  OE2 GLU  56   4050    10497   4606   -1066 1163 -2063
ATOM    464  N   HIS  57   -11.890 29.289  62.866 1.000 32.20
ANISOU  464  N   HIS  57   3273    4700    4261   -549  1540 -670
ATOM    465  CA  HIS  57   -13.101 30.078  62.909 1.000 33.38
ANISOU  465  CA  HIS  57   3795    4885    4002   -110  1553 -1239
ATOM    466  C   HIS  57   -13.981 29.873  61.697 1.000 32.85
ANISOU  466  C   HIS  57   3380    4736    4367   278   1506 -1797
ATOM    467  O   HIS  57   -15.012 30.533  61.571 1.000 37.09
ANISOU  467  O   HIS  57   3362    4733    5998   276   1087 -2205
ATOM    468  CB  HIS  57   -12.802 31.573  62.976 1.000 37.39
ANISOU  468  CB  HIS  57   4327    4959    4922   -193  1402 -1970
ATOM    469  CG  HIS  57   -11.981 31.949  64.162 1.000 36.99
ANISOU  469  CG  HIS  57   4111    5046    4896   680   1344 -2319
ATOM    470  ND1 HIS  57   -12.465 31.917  65.453 1.000 38.84
ANISOU  470  ND1 HIS  57   5090    4844    4823   -171  1362 -1598
ATOM    471  CD2 HIS  57   -10.707 32.387  64.232 1.000 37.91
ANISOU  471  CD2 HIS  57   5259    4197    4947   -891  1544 -2828
ATOM    472  CE1 HIS  57   -11.510 32.305  66.275 1.000 40.37
ANISOU  472  CE1 HIS  57   5481    5191    4668   -243  1087 -1361
ATOM    473  NE2 HIS  57   -10.441 32.592  65.552 1.000 35.63
ANISOU  473  NE2 HIS  57   4420    4376    4743   980   799  -1492
ATOM    474  N   GLY  58   -13.464 29.068  60.786 1.000 32.06
ANISOU  474  N   GLY  58   4402    3186    4594   5  1572  -1525
ATOM    475  CA  GLY  58   -14.290 28.731  59.627 1.000 35.74
ANISOU  475  CA  GLY  58   4508    4402    4669   -1129 1877 -1893
ATOM    476  C   GLY  58   -15.449 27.859  60.099 1.000 31.52
ANISOU  476  C   GLY  58   3317    3688    4969   308   1657 -593
ATOM    477  O   GLY  58   -15.245 26.952  60.922 1.000 32.66
ANISOU  477  O   GLY  58   4561    4176    3674   -204  624  -1012
ATOM    478  N   SER  59   -16.632 28.152  59.574 1.000 31.03
ANISOU  478  N   SER  59   3786    3623    4379   519   1142 -1442
ATOM    479  CA  SER  59   -17.823 27.359  59.859 1.000 32.03
ANISOU  479  CA  SER  59   3305    3925    4939   757   850  -1188
ATOM    480  C   SER  59   -17.763 26.034  59.117 1.000 37.27
ANISOU  480  C   SER  59   3654    4001    6507   0  2065  -1682
ATOM    481  O   SER  59   -16.987 25.858  58.181 1.000 31.23
ANISOU  481  O   SER  59   3027    3655    5184   613   1003 -1174
ATOM    482  CB  SER  59   -19.077 28.136  59.444 1.000 39.80
ANISOU  482  CB  SER  59   3930    5925    5266   1707  -545 -2846
ATOM    483  OG  SER  59   -19.252 28.159  58.029 1.000 35.38
ANISOU  483  OG  SER  59   3505    4800    5137   355   119  -1624
ATOM    484  N   GLU  60   -18.589 25.065  59.507 1.000 46.32
ANISOU  484  N   GLU  60   5438    6083    6078   -2395 2115 -2700
ATOM    485  CA  GLU  60   -18.573 23.801  58.754 1.000 34.21
ANISOU  485  CA  GLU  60   3381    4798    4818   -960  716  -1238
ATOM    486  C   GLU  60   -19.033 24.055  57.330 1.000 34.22
ANISOU  486  C   GLU  60   4659    3711    4632   455   1378 -847
ATOM    487  O   GLU  60   -18.616 23.437  56.361 1.000 29.91
ANISOU  487  O   GLU  60   3708    3040    4615   -679  2037 -604
ATOM    488  CB  GLU  60   -19.390 22.742  59.488 1.000 38.26
ANISOU  488  CB  GLU  60   5012    5567    3958   -1599 748  -1000
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ATOM	489	CG	GLU	60	-18.625	22.182	60.678	1.000	42.01			
ANISOU	489	CG	GLU	60	5470	5439	5055	503	950	-782		
ATOM	490	CD	GLU	60	-17.307	21.528	60.312	1.000	45.34			
ANISOU	490	CD	GLU	60	4036	7496	5695	-885	1094	-2276		
ATOM	491	OE1	GLU	60	-17.219	20.867	59.264	1.000	49.69			
ANISOU	491	OE1	GLU	60	5383	6689	6809	-864	1730	-2838		
ATOM	492	OE2	GLU	60	-16.323	21.659	61.084	1.000	43.62			
ANISOU	492	OE2	GLU	60	4677	4974	6924	-1984	109	-12		
ATOM	493	N	ALA	61	-19.928	25.028	57.167	1.000	34.26			
ANISOU	493	N	ALA	61	3091	3912	6014	-81	1209	-1122		
ATOM	494	CA	ALA	61	-20.408	25.324	55.823	1.000	33.07			
ANISOU	494	CA	ALA	61	1647	4409	6508	-228	657	-1105		
ATOM	495	C	ALA	61	-19.314	25.876	54.938	1.000	30.69			
ANISOU	495	C	ALA	61	2053	3742	5866	-59	640	-1066		
ATOM	496	O	ALA	61	-19.138	25.482	53.790	1.000	31.15			
ANISOU	496	O	ALA	61	2754	2893	6189	31	793	-1285		
ATOM	497	CB	ALA	61	-21.543	26.336	55.932	1.000	34.43			
ANISOU	497	CB	ALA	61	2783	4403	5897	288	1210	-1650		
ATOM	498	N	GLU	62	-18.568	26.824	55.498	1.000	28.80			
ANISOU	498	N	GLU	62	2168	3404	5371	-9	915	-964		
ATOM	499	CA	GLU	62	-17.478	27.395	54.704	1.000	26.78			
ANISOU	499	CA	GLU	62	2339	2374	5461	423	871	-413		
ATOM	500	C	GLU	62	-16.432	26.330	54.389	1.000	22.61			
ANISOU	500	C	GLU	62	2569	1621	4402	84	1049	-376		
ATOM	501	O	GLU	62	-15.851	26.316	53.289	1.000	24.41			
ANISOU	501	O	GLU	62	2399	2669	4209	-132	801	-548		
ATOM	502	CB	GLU	62	-16.861	28.591	55.429	1.000	32.86			
ANISOU	502	CB	GLU	62	3129	2117	7239	251	2039	-1358		
ATOM	503	CG	GLU	62	-17.739	29.834	55.554	1.000	34.69			
ANISOU	503	CG	GLU	62	2824	2859	7499	916	-95	-1430		
ATOM	504	CD	GLU	62	-17.274	30.810	56.616	1.000	38.93			
ANISOU	504	CD	GLU	62	4998	2780	7014	1622	224	-1820		
ATOM	505	OE1	GLU	62	-16.861	30.391	57.717	1.000	40.92			
ANISOU	505	OE1	GLU	62	4844	3636	7068	1268	34	-1673		
ATOM	506	OE2	GLU	62	-17.324	32.041	56.385	1.000	45.13			
ANISOU	506	OE2	GLU	62	7600	2889	6658	-525	1698	-1099		
ATOM	507	N	LYS	63	-16.193	25.431	55.345	1.000	25.20			
ANISOU	507	N	LYS	63	2470	2380	4723	312	1050	8		
ATOM	508	CA	LYS	63	-15.214	24.369	55.207	1.000	21.62			
ANISOU	508	CA	LYS	63	2608	2894	2712	688	349	-446		
ATOM	509	C	LYS	63	-15.708	23.397	54.147	1.000	22.42			
ANISOU	509	C	LYS	63	2930	3038	2549	84	433	-217		
ATOM	510	O	LYS	63	-14.913	23.038	53.289	1.000	24.17			
ANISOU	510	O	LYS	63	3340	2354	3491	239	782	-790		
ATOM	511	CB	LYS	63	-14.940	23.650	56.534	1.000	24.50			
ANISOU	511	CB	LYS	63	3411	3057	2842	42	-105	-299		
ATOM	512	CG	LYS	63	-13.963	24.465	57.381	1.000	27.58			
ANISOU	512	CG	LYS	63	4640	2792	3045	-302	-465	-306		
ATOM	513	CD	LYS	63	-13.866	23.937	58.811	1.000	26.09			
ANISOU	513	CD	LYS	63	3132	3570	3211	305	-575	-12		
ATOM	514	CE	LYS	63	-12.761	24.695	59.560	1.000	28.96			
ANISOU	514	CE	LYS	63	4342	3579	3083	-317	-286	-792		
ATOM	515	NZ	LYS	63	-12.927	24.614	61.030	1.000	35.00			
ANISOU	515	NZ	LYS	63	4884	5356	3057	64	-298	-817		
ATOM	516	N	ARG	64	-17.007	23.112	54.143	1.000	29.82			
ANISOU	516	N	ARG	64	3238	2676	5418	-533	1111	-1259		
ATOM	517	CA	ARG	64	-17.521	22.169	53.118	1.000	25.56			
ANISOU	517	CA	ARG	64	2396	2474	4841	-170	1252	-962		
ATOM	518	C	ARG	64	-17.417	22.735	51.708	1.000	28.45			
ANISOU	518	C	ARG	64	3022	2681	5106	153	1369	-562		
ATOM	519	O	ARG	64	-17.149	21.981	50.759	1.000	22.57			

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ANISOU  519  O   ARG  64   1672    2466    4436   -71   148  -395
ATOM    520  CB  ARG  64  -18.937 21.809  53.537 1.000 32.48
ANISOU  520  CB  ARG  64   2669    4144    5526   -809  1483 -1029
ATOM    521  CG  ARG  64  -19.094 20.442  54.189 1.000 45.55
ANISOU  521  CG  ARG  64   4444    4749    8116  -2443  1343  -153
ATOM    522  CD  ARG  64  -20.557 19.985  54.080 1.000 59.48
ANISOU  522  CD  ARG  64   5723    6760   10116  -3977 -2863  2461
ATOM    523  NE  ARG  64  -20.759 19.485  52.714 1.000 77.63
ANISOU  523  NE  ARG  64  10254    9303    9938  -4031 -4193  2666
ATOM    524  CZ  ARG  64  -21.166 20.236  51.696 1.000 60.23
ANISOU  524  CZ  ARG  64   5289    6952   10644  -1128 -4334   501
ATOM    525  NH1 ARG  64  -21.424 21.528  51.892 1.000 91.64
ANISOU  525  NH1 ARG  64  18286    5072   11461  -5082 -3134   -75
ATOM    526  NH2 ARG  64  -21.286 19.711  50.489 1.000 43.67
ANISOU  526  NH2 ARG  64   3318    4095    9178   -183 -1521  2085
ATOM    527  N   ALA  65  -17.624 24.041  51.515 1.000 26.71
ANISOU  527  N   ALA  65   1907    2770    5472    189   936  -556
ATOM    528  CA  ALA  65  -17.522 24.661  50.199 1.000 24.91
ANISOU  528  CA  ALA  65   1798    2379    5288    280   417  -754
ATOM    529  C   ALA  65  -16.109 24.575  49.595 1.000 21.81
ANISOU  529  C   ALA  65   1808    2408    4071    597   155  -626
ATOM    530  O   ALA  65  -15.935 24.724  48.381 1.000 24.13
ANISOU  530  O   ALA  65   2127    3076    3964    224  -220  -485
ATOM    531  CB  ALA  65  -18.023 26.096  50.221 1.000 31.78
ANISOU  531  CB  ALA  65   3096    2984    5993   1337  1401  -453
ATOM    532  N   VAL  66  -15.098 24.306  50.426 1.000 19.29
ANISOU  532  N   VAL  66   1836    1880    3614    466   360  -541
ATOM    533  CA  VAL  66  -13.723 24.167  49.953 1.000 18.17
ANISOU  533  CA  VAL  66   1636    1653    3616    204    79  -487
ATOM    534  C   VAL  66  -13.166 22.767  50.248 1.000 15.18
ANISOU  534  C   VAL  66   1516    1638    2613    120   126  -571
ATOM    535  O   VAL  66  -11.959 22.623  50.353 1.000 17.63
ANISOU  535  O   VAL  66   1567    2071    3060    217  -106  -317
ATOM    536  CB  VAL  66  -12.784 25.277  50.437 1.000 18.91
ANISOU  536  CB  VAL  66   2175    1576    3433    183  -135  -598
ATOM    537  CG1 VAL  66  -13.139 26.627  49.805 1.000 20.60
ANISOU  537  CG1 VAL  66   2067    1751    4010    219   593   -83
ATOM    538  CG2 VAL  66  -12.736 25.373  51.945 1.000 21.61
ANISOU  538  CG2 VAL  66   2689    2066    3455    102    22  -603
ATOM    539  N   THR  67  -14.048 21.792  50.343 1.000 18.30
ANISOU  539  N   THR  67   1761    1614    3577   -20   -6  -514
ATOM    540  CA  THR  67  -13.673 20.403  50.563 1.000 17.18
ANISOU  540  CA  THR  67   1927    1656    2946   -32   50  -556
ATOM    541  C   THR  67  -13.979 19.566  49.332 1.000 16.52
ANISOU  541  C   THR  67   1763    1742    2773    21 27  -467
ATOM    542  O   THR  67  -15.107 19.613  48.811 1.000 18.13
ANISOU  542  O   THR  67   1750    2211    2929    73  -86  -383
ATOM    543  CB  THR  67  -14.373 19.791  51.782 1.000 18.54
ANISOU  543  CB  THR  67   2202    2014    2827   192   224  -492
ATOM    544  OG1 THR  67  -14.060 20.554  52.961 1.000 20.14
ANISOU  544  OG1 THR  67   2481    2251    2920  -108   155  -468
ATOM    545  CG2 THR  67  -13.912 18.364  52.017 1.000 20.04
ANISOU  545  CG2 THR  67   2393    2016    3203    29  -86  -235
ATOM    546  N   SER  68  -13.030 18.818  48.821 1.000 16.71
ANISOU  546  N   SER  68   1612    1720    3018  -135   154  -498
ATOM    547  CA  SER  68  -13.281 17.947  47.688 1.000 16.33
ANISOU  547  CA  SER  68   1508    1631    3065  -184   365  -561
ATOM    548  C   SER  68  -14.223 16.795  48.057 1.000 14.85
ANISOU  548  C   SER  68   1194    1775    2672   -81   197  -448
ATOM    549  O   SER  68  -14.303 16.431  49.233 1.000 16.36
ANISOU  549  O   SER  68   1783    1775    2659  -145   192  -481
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ATOM    550  CB  SER   68     -11.958  17.303  47.257 1.000 17.84
ANISOU  550  CB  SER   68        1459    2139    3182   -87   647  -313
ATOM    551  OG  SER   68     -10.998  18.259  46.904 1.000 17.21
ANISOU  551  OG  SER   68        1659    1987    2893   -75   364   -49
ATOM    552  N   PRO   69     -14.929  16.284  47.054 1.000 15.89
ANISOU  552  N   PRO   69        1574    1661    2803  -201  -103  -280
ATOM    553  CA  PRO   69     -15.877  15.182  47.339 1.000 16.42
ANISOU  553  CA  PRO   69        1428    1903    2908  -251  -148  -218
ATOM    554  C   PRO   69     -15.168  13.889  47.684 1.000 17.22
ANISOU  554  C   PRO   69        1633    1578    3331  -199   266  -424
ATOM    555  O   PRO   69     -15.794  12.997  48.287 1.000 18.35
ANISOU  555  O   PRO   69        1815    1760    3399  -365   232  -376
ATOM    556  CB  PRO   69     -16.712  15.057  46.060 1.000 16.75
ANISOU  556  CB  PRO   69        1354    2279    2733  -360   155  -729
ATOM    557  CG  PRO   69     -15.799  15.637  45.008 1.000 16.72
ANISOU  557  CG  PRO   69        1553    1971    2827  -359    38  -452
ATOM    558  CD  PRO   69     -15.059  16.797  45.681 1.000 17.10
ANISOU  558  CD  PRO   69        1918    1804    2776  -344  -119  -313
ATOM    559  N   VAL   70     -13.884  13.746  47.366 1.000 18.07
ANISOU  559  N   VAL   70        1716    1764    3384   -89   292  -215
ATOM    560  CA  VAL   70     -13.100  12.594  47.824 1.000 17.34
ANISOU  560  CA  VAL   70        1763    1851    2974   -20   260  -196
ATOM    561  C   VAL   70     -11.995  13.142  48.720 1.000 17.59
ANISOU  561  C   VAL   70        2207    1686    2788  -180   159  -142
ATOM    562  O   VAL   70     -11.431  14.186  48.389 1.000 18.59
ANISOU  562  O   VAL   70        1794    1688    3581   -49   152
ATOM    563  CB  VAL   70     -12.429  11.757  46.724 1.000 18.10
ANISOU  563  CB  VAL   70        1922    1756    3199  -353   560  -446
ATOM    564  CG1 VAL   70     -13.441  10.754  46.213 1.000 20.54
ANISOU  564  CG1 VAL   70        1927    2611    3268  -369    76  -663
ATOM    565  CG2 VAL   70     -11.760  12.608  45.642 1.000 17.65
ANISOU  565  CG2 VAL   70        2379    1806    2520   145     9   10
ATOM    566  N   PRO   71     -11.697  12.466  49.815 1.000 16.21
ANISOU  566  N   PRO   71        1653    1810    2695   -34   464  -156
ATOM    567  CA  PRO   71     -10.839  13.091  50.833 1.000 17.32
ANISOU  567  CA  PRO   71        1795    1931    2854  -121   184   -12
ATOM    568  C   PRO   71      -9.356  12.804  50.590 1.000 17.67
ANISOU  568  C   PRO   71        1865    1927    2921    46   -57   156
ATOM    569  O   PRO   71      -8.585  12.223  51.350 1.000 20.57
ANISOU  569  O   PRO   71        2218    2247    3350   424    28   474
ATOM    570  CB  PRO   71     -11.362  12.458  52.117 1.000 19.76
ANISOU  570  CB  PRO   71        2976    1862    2668  -347   479  -304
ATOM    571  CG  PRO   71     -11.721  11.056  51.670 1.000 19.08
ANISOU  571  CG  PRO   71        2838    1805    2608  -267   259  -234
ATOM    572  CD  PRO   71     -12.323  11.220  50.286 1.000 17.97
ANISOU  572  CD  PRO   71        2314    1974    2538  -390   451  -167
ATOM    573  N   THR   72      -8.894  13.338  49.446 1.000 17.15
ANISOU  573  N   THR   72        1677    2231    2610  -215   -17  -165
ATOM    574  CA  THR   72      -7.573  13.012  48.935 1.000 16.83
ANISOU  574  CA  THR   72        1721    1863    2810   -60  -134  -472
ATOM    575  C   THR   72      -6.490  14.000  49.358 1.000 15.20
ANISOU  575  C   THR   72        1791    1623    2362  -304   163   -73
ATOM    576  O   THR   72      -5.320  13.729  49.104 1.000 17.49
ANISOU  576  O   THR   72        1776    1961    2908   -61   -31  -225
ATOM    577  CB  THR   72      -7.533  12.971  47.399 1.000 16.18
ANISOU  577  CB  THR   72        1552    1848    2748  -146   -86  -261
ATOM    578  OG1 THR   72      -8.091  14.238  47.005 1.000 17.81
ANISOU  578  OG1 THR   72        1856    1880    3031   -34   115  -191
ATOM    579  CG2 THR   72      -8.338  11.816  46.825 1.000 17.49
ANISOU  579  CG2 THR   72        1953    2087    2605  -550   181  -329
ATOM    580  N   MET   73      -6.877  15.098  49.987 1.000 17.78
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ANISOU	580	N	MET	73	2057	1748	2951	-58	-254	-426	
ATOM	581	CA	MET	73	-5.867	16.117	50.394	1.000	16.58		
ANISOU	581	CA	MET	73	1796	1708	2797	88	-302	-340	
ATOM	582	C	MET	73	-5.073	16.618	49.198	1.000	16.65		
ANISOU	582	C	MET	73	1514	1787	3027	241	-162	-420	
ATOM	583	O	MET	73	-3.911	17.039	49.292	1.000	19.39		
ANISOU	583	O	MET	73	1705	2313	3348	-112	-240	-540	
ATOM	584	CB	MET	73	-4.925	15.531	51.469	1.000	20.56		
ANISOU	584	CB	MET	73	2099	2629	3083	345	-507	-286	
ATOM	585	CG	MET	73	-5.703	15.154	52.715	1.000	30.33		
ANISOU	585	CG	MET	73	3008	5133	3384	-69	-609	1027	
ATOM	586	SD	MET	73	-4.692	14.263	53.891	1.000	36.13		
ANISOU	586	SD	MET	73	4121	5050	4558	336	-918	1596	
ATOM	587	CE	MET	73	-3.165	13.987	53.082	1.000	58.07		
ANISOU	587	CE	MET	73	2810	8820	10435	975	-1592	-3138	
ATOM	588	N	ARG	74	-5.687	16.632	48.025	1.000	16.83		
ANISOU	588	N	ARG	74	1699	1714	2982	-6	-211	131	
ATOM	589	CA	ARG	74	-5.099	17.215	46.817	1.000	15.87		
ANISOU	589	CA	ARG	74	1365	1618	3046	-17	52	-325	
ATOM	590	C	ARG	74	-5.359	18.714	46.761	1.000	14.22		
ANISOU	590	C	ARG	74	1484	1651	2269	141	-32	-42	
ATOM	591	O	ARG	74	-4.472	19.488	46.353	1.000	15.45		
ANISOU	591	O	ARG	74	1525	1758	2586	-12	-46	-73	
ATOM	592	CB	ARG	74	-5.675	16.530	45.566	1.000	15.68		
ANISOU	592	CB	ARG	74	1330	1667	2959	160	-14	-311	
ATOM	593	CG	ARG	74	-4.890	16.941	44.299	1.000	16.46		
ANISOU	593	CG	ARG	74	1325	1870	3059	-175	55	-395	
ATOM	594	CD	ARG	74	-5.655	16.396	43.072	1.000	16.37		
ANISOU	594	CD	ARG	74	1789	1533	2899	-181	-8	-177	
ATOM	595	NE	ARG	74	-4.840	16.601	41.857	1.000	19.21		
ANISOU	595	NE	ARG	74	2289	1990	3020	-142	241	-156	
ATOM	596	CZ	ARG	74	-4.944	17.626	41.039	1.000	17.00		
ANISOU	596	CZ	ARG	74	1545	2351	2562	-67	26	-147	
ATOM	597	NH1	ARG	74	-5.878	18.573	41.213	1.000	18.00		
ANISOU	597	NH1	ARG	74	1818	2383	2638	51	-66	-220	
ATOM	598	NH2	ARG	74	-4.144	17.703	39.987	1.000	20.50		
ANISOU	598	NH2	ARG	74	2285	2972	2532	-110	310	-387	
ATOM	599	N	ARG	75	-6.579	19.151	47.101	1.000	15.28		
ANISOU	599	N	ARG	75	1755	1544	2507	137	340	-173	
ATOM	600	CA	ARG	75	-6.999	20.550	46.980	1.000	14.68		
ANISOU	600	CA	ARG	75	1679	1627	2272	236	98	-150	
ATOM	601	C	ARG	75	-7.956	20.869	48.122	1.000	14.75		
ANISOU	601	C	ARG	75	1445	1747	2414	124	133	-233	
ATOM	602	O	ARG	75	-8.760	19.989	48.460	1.000	18.12		
ANISOU	602	O	ARG	75	1677	2109	3101	-156	458	-433	
ATOM	603	CB	ARG	75	-7.747	20.804	45.668	1.000	15.59		
ANISOU	603	CB	ARG	75	1577	2030	2317	1	46	-106	
ATOM	604	CG	ARG	75	-6.848	20.634	44.441	1.000	15.63		
ANISOU	604	CG	ARG	75	1495	2110	2334	9	147	220	
ATOM	605	CD	ARG	75	-5.712	21.618	44.334	1.000	15.59		
ANISOU	605	CD	ARG	75	1658	1792	2475	11	130	-10	
ATOM	606	NE	ARG	75	-5.061	21.601	43.011	1.000	15.25		
ANISOU	606	NE	ARG	75	1421	1779	2596	122	227	144	
ATOM	607	CZ	ARG	75	-3.957	20.865	42.732	1.000	14.90		
ANISOU	607	CZ	ARG	75	1079	2361	2221	71	-86	242	
ATOM	608	NH1	ARG	75	-3.405	20.091	43.664	1.000	16.18		
ANISOU	608	NH1	ARG	75	1804	1722	2623	-134	-387	337	
ATOM	609	NH2	ARG	75	-3.418	20.940	41.518	1.000	15.83		
ANISOU	609	NH2	ARG	75	1677	2107	2232	-193	221	0	
ATOM	610	N	GLY	76	-7.895	22.086	48.651	1.000	16.06		
ANISOU	610	N	GLY	76	1686	1904	2513	109	220	-464	

ATOM	611	CA	GLY	76	-8.858	22.532	49.637	1.000	16.67			
ANISOU	611	CA	GLY	76	1650	2260	2425	-70	199	-612		
ATOM	612	C	GLY	76	-8.602	22.002	51.036	1.000	16.32			
ANISOU	612	C	GLY	76	1584	2014	2602	-126	268	-347		
ATOM	613	O	GLY	76	-7.469	21.651	51.370	1.000	16.87			
ANISOU	613	O	GLY	76	1638	1998	2773	-45	308	-218		
ATOM	614	N	PHE	77	-9.643	22.025	51.863	1.000	16.88			
ANISOU	614	N	PHE	77	1597	2141	2675	-7	283	-191		
ATOM	615	CA	PHE	77	-9.584	21.646	53.274	1.000	17.61			
ANISOU	615	CA	PHE	77	1838	2196	2656	109	328	-114		
ATOM	616	C	PHE	77	-9.776	20.154	53.512	1.000	17.64			
ANISOU	616	C	PHE	77	1855	2248	2600	-68	243	-185		
ATOM	617	O	PHE	77	-10.589	19.528	52.831	1.000	18.23			
ANISOU	617	O	PHE	77	1844	2488	2594	-183	357	-240		
ATOM	618	CB	PHE	77	-10.698	22.383	53.998	1.000	17.70			
ANISOU	618	CB	PHE	77	1730	2515	2480	162	65	-344		
ATOM	619	CG	PHE	77	-10.877	22.081	55.473	1.000	19.61			
ANISOU	619	CG	PHE	77	2405	2530	2515	195	261	-516		
ATOM	620	CD1	PHE	77	-9.966	22.594	56.395	1.000	22.27			
ANISOU	620	CD1	PHE	77	2514	3523	2426	431	-23	-527		
ATOM	621	CD2	PHE	77	-11.917	21.285	55.941	1.000	21.31			
ANISOU	621	CD2	PHE	77	3282	2070	2743	36	615	-288		
ATOM	622	CE1	PHE	77	-10.116	22.294	57.742	1.000	21.05			
ANISOU	622	CE1	PHE	77	2719	2768	2510	171	221	-339		
ATOM	623	CE2	PHE	77	-12.079	20.991	57.300	1.000	25.09			
ANISOU	623	CE2	PHE	77	2967	4120	2447	-501	625	-826		
ATOM	624	CZ	PHE	77	-11.175	21.523	58.207	1.000	23.79			
ANISOU	624	CZ	PHE	77	2263	3681	3095	-1	376	-756		
ATOM	625	N	THR	78	-9.022	19.631	54.490	1.000	17.64			
ANISOU	625	N	THR	78	1616	2161	2925	37	336	1		
ATOM	626	CA	THR	78	-9.296	18.279	54.983	1.000	18.12			
ANISOU	626	CA	THR	78	1926	2243	2717	-157	624	-28		
ATOM	627	C	THR	78	-9.291	18.316	56.505	1.000	18.66			
ANISOU	627	C	THR	78	2120	2308	2663	-367	519	-288		
ATOM	628	O	THR	78	-8.335	18.821	57.095	1.000	21.42			
ANISOU	628	O	THR	78	2158	2883	3098	-432	90	177		
ATOM	629	CB	THR	78	-8.252	17.242	54.521	1.000	21.00			
ANISOU	629	CB	THR	78	2973	2067	2939	113	428	-574		
ATOM	630	OG1	THR	78	-8.027	17.392	53.104	1.000	21.18			
ANISOU	630	OG1	THR	78	2544	2671	2833	160	317	-773		
ATOM	631	CG2	THR	78	-8.735	15.832	54.800	1.000	26.65			
ANISOU	631	CG2	THR	78	3759	2227	4141	-275	853	-618		
ATOM	632	N	GLY	79	-10.311	17.804	57.181	1.000	20.36			
ANISOU	632	N	GLY	79	2669	2379	2690	-670	630	-144		
ATOM	633	CA	GLY	79	-10.344	17.679	58.623	1.000	25.96			
ANISOU	633	CA	GLY	79	3871	3249	2745	-790	576	375		
ATOM	634	C	GLY	79	-10.029	16.238	59.039	1.000	39.70			
ANISOU	634	C	GLY	79	6407	3542	5135	-1658	-1944	1511		
ATOM	635	O	GLY	79	-10.623	15.303	58.491	1.000	31.02			
ANISOU	635	O	GLY	79	4327	3187	4272	-404	419	-75		
ATOM	636	N	LEU	80	-9.069	16.055	59.936	1.000	36.07			
ANISOU	636	N	LEU	80	4380	4536	4788	1381	-564	-835		
ATOM	637	CA	LEU	80	-8.634	14.713	60.340	1.000	32.52			
ANISOU	637	CA	LEU	80	3640	4083	4632	611	-502	-898		
ATOM	638	C	LEU	80	-9.131	14.311	61.716	1.000	39.82			
ANISOU	638	C	LEU	80	5051	4652	5428	-128	418	-538		
ATOM	639	O	LEU	80	-9.998	14.963	62.305	1.000	37.05			
ANISOU	639	O	LEU	80	5057	3807	5213	-292	666	87		
ATOM	640	CB	LEU	80	-7.122	14.580	60.265	1.000	38.36			
ANISOU	640	CB	LEU	80	3821	5456	5299	1568	-33	-1406		
ATOM	641	CG	LEU	80	-6.488	14.753	58.883	1.000	38.27			

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ANISOU  641  CG  LEU   80     3714   5900   4926    725   -288  -2588
ATOM    642  CD1 LEU   80    -5.007  14.359  58.948 1.000 45.41
ANISOU  642  CD1 LEU   80     2579   8505   6170   -1092   -76     3     7
ATOM    643  CD2 LEU   80    -7.170  13.856  57.854 1.000 40.75
ANISOU  643  CD2 LEU   80     4296   5601   5587    872   -1965  -1793
ATOM    644  N   SER   98    -6.459  17.442  63.930 1.000 36.72
ANISOU  644  N   SER   98     3404   6429   4118   -2114   -698  1948
ATOM    645  CA  SER   98    -5.629  17.877  62.824 1.000 39.59
ANISOU  645  CA  SER   98     6031   5376   3635    -449    383   2177
ATOM    646  C   SER   98    -6.402  18.372  61.610 1.000 29.89
ANISOU  646  C   SER   98     3806   3509   4040    141    640   1204
ATOM    647  O   SER   98    -7.474  17.856  61.304 1.000 38.27
ANISOU  647  O   SER   98     4936   4300   5303   -1107    395    885
ATOM    648  CB  SER   98    -4.694  16.739  62.358 1.000 44.06
ANISOU  648  CB  SER   98     3175   7425   6141    633   -753  2704
ATOM    649  OG  SER   98    -3.672  17.368  61.583 1.000 46.84
ANISOU  649  OG  SER   98     3497   6502   7797     95   -408   2418
ATOM    650  N   MET   99    -5.829  19.317  60.869 1.000 28.56
ANISOU  650  N   MET   99     5029   3458   2365   -1080   -550  5546
ATOM    651  CA  MET   99    -6.426  19.941  59.700 1.000 21.44
ANISOU  651  CA  MET   99     2284   3549   2315    -182    157   1322
ATOM    652  C   MET   99    -5.376  20.229  58.624 1.000 19.16
ANISOU  652  C   MET   99     2306   2592   2382    -433     60   1377
ATOM    653  O   MET   99    -4.232  20.575  58.930 1.000 23.34
ANISOU  653  O   MET   99     2489   3920   2460    -773    225   -410
ATOM    654  CB  MET   99    -7.164  21.209  60.105 1.000 25.20
ANISOU  654  CB  MET   99     3172   3375   3028    -572    661   -547
ATOM    655  CG  MET   99    -8.481  20.965  60.872 1.000 25.85
ANISOU  655  CG  MET   99     3172   3862   2787    -275    739   -782
ATOM    656  SD  MET   99    -9.251  22.517  61.389 1.000 32.21
ANISOU  656  SD  MET   99     4405   3750   4083    -133   1580   -568
ATOM    657  CE  MET   99    -8.884  22.461  63.145 1.000 76.12
ANISOU  657  CE  MET   99    14782  11538   2603   -3321   3478  -3241
ATOM    658  N   CYS  100    -5.778  20.094  57.361 1.000 18.85
ANISOU  658  N   CYS  100     2434   2443   2285    -160    93   1194
ATOM    659  CA  CYS  100    -4.868  20.333  56.234 1.000 18.55
ANISOU  659  CA  CYS  100     2251   2380   2418     92   127   2362
ATOM    660  C   CYS  100    -5.496  21.312  55.228 1.000 16.26
ANISOU  660  C   CYS  100     1826   2031   2321    110    329      2
ATOM    661  O   CYS  100    -6.728  21.308  55.071 1.000 17.69
ANISOU  661  O   CYS  100     1741   2395   2586    -69    154   -104
ATOM    662  CB  CYS  100    -4.604  18.982  55.545 1.000 18.46
ANISOU  662  CB  CYS  100     2822   2081   2111     98   118   5111
ATOM    663  SG  CYS  100    -3.243  18.974  54.329 1.000 22.76
ANISOU  663  SG  CYS  100     2622   2968   3058    307    391     1  0
ATOM    664  N   TYR  101    -4.697  22.069  54.498 1.000 17.49
ANISOU  664  N   TYR  101     1839   2473   2332     46  291   2224
ATOM    665  CA  TYR  101    -5.117  22.874  53.373 1.000 15.38
ANISOU  665  CA  TYR  101     1946   1939   1960    -50    90   -262
ATOM    666  C   TYR  101    -4.102  22.594  52.245 1.000 13.65
ANISOU  666  C   TYR  101     1676   1543   1967     -2  -123   -151
ATOM    667  O   TYR  101    -2.896  22.629  52.475 1.000 15.95
ANISOU  667  O   TYR  101     1611   2231   2217    -43   -232  -212
ATOM    668  CB  TYR  101    -5.122  24.382  53.739 1.000 19.02
ANISOU  668  CB  TYR  101     2816   2082   2328    234    48   -519
ATOM    669  CG  TYR  101    -5.617  25.109  52.498 1.000 17.85
ANISOU  669  CG  TYR  101     2084   1895   2804     18   -26  -231
ATOM    670  CD1 TYR  101    -6.964  25.134  52.171 1.000 18.25
ANISOU  670  CD1 TYR  101     2042   1596   3298     29  28   -496
ATOM    671  CD2 TYR  101    -4.730  25.778  51.658 1.000 17.77
ANISOU  671  CD2 TYR  101     2037   1611   3106    -46   -125  -127
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ATOM    672  CE1 TYR   101 -7.406  25.796  51.036 1.000 19.63
ANISOU  672  CE1 TYR   101 1977    1776    3704    88 -241  -221
ATOM    673  CE2 TYR   101 -5.147  26.386  50.478 1.000 20.46
ANISOU  673  CE2 TYR   101 2060    2608    3108    239   40 182
ATOM    674  CZ  TYR   101 -6.504  26.392  50.166 1.000 20.29
ANISOU  674  CZ  TYR   101 2187    2397    3127    -73  -353 -260
ATOM    675  OH  TYR   101 -6.932  26.995  49.000 1.000 23.34
ANISOU  675  OH  TYR   101 2790    2555    3523    -3 -641   5  2
ATOM    676  N   SER   102 -4.648  22.210  51.097 1.000 14.60
ANISOU  676  N   SER   102 1618    1890    2041   -61  -109 -477
ATOM    677  CA  SER   102 -3.797  21.792  49.980 1.000 14.52
ANISOU  677  CA  SER   102 1684    1802    2030   -108   62 -276
ATOM    678  C   SER   102 -4.011  22.670  48.747 1.000 14.99
ANISOU  678  C   SER   102 1545    1790    2361   -296  -41   2  1
ATOM    679  O   SER   102 -5.167  23.105  48.477 1.000 16.73
ANISOU  679  O   SER   102 1589    2342    2425    2   128  -  3
ATOM    680  CB  SER   102 -4.163  20.340  49.593 1.000 13.82
ANISOU  680  CB  SER   102 1692    1548    2013    174    9  -138
ATOM    681  OG  SER   102 -3.996  19.476  50.720 1.000 16.06
ANISOU  681  OG  SER   102 1886    2066    2153    97 -121   6  3
ATOM    682  N   MET   103 -2.978  22.775  47.920 1.000 14.47
ANISOU  682  N   MET   103 1568    1724    2206    51  -59  152
ATOM    683  CA  MET   103 -3.102  23.552  46.687 1.000 16.58
ANISOU  683  CA  MET   103 2194    1933    2173    331   -74  253
ATOM    684  C   MET   103 -2.150  23.013  45.608 1.000 14.41
ANISOU  684  C   MET   103 1598    1793    2083   -202  -210  6  3
ATOM    685  O   MET   103 -1.157  22.347  45.920 1.000 16.24
ANISOU  685  O   MET   103 1527    2384    2259   -61   -23   468
ATOM    686  CB  MET   103 -2.716  25.004  46.835 1.000 28.78
ANISOU  686  CB  MET   103 6537    1318    3081    859   -207 366
ATOM    687  CG  MET   103 -3.258  25.986  47.801 1.000 22.60
ANISOU  687  CG  MET   103 2531    2157    3900   -161   -57  -291
ATOM    688  SD  MET   103 -2.338  27.505  47.506 1.000 20.60
ANISOU  688  SD  MET   103 2499    1927    3400    -4  -164  -226
ATOM    689  CE  MET   103 -2.587  27.945  45.804 1.000 21.63
ANISOU  689  CE  MET   103 2319    2601    3300    308   209  -236
ATOM    690  N   GLY   104 -2.439  23.430  44.378 1.000 15.44
ANISOU  690  N   GLY   104 1468    2228    2169    -68  -120 164
ATOM    691  CA  GLY   104 -1.511  23.199  43.276 1.000 16.13
ANISOU  691  CA  GLY   104 1688    2202    2241    42   65 469
ATOM    692  C   GLY   104 -1.583  24.355  42.294 1.000 15.76
ANISOU  692  C   GLY   104 1706    1997    2286    -32  -194 388
ATOM    693  O   GLY   104 -1.987  25.478  42.653 1.000 19.06
ANISOU  693  O   GLY   104 1953    2032    3256    -71   144  333
ATOM    694  N   THR   105 -1.151  24.092  41.054 1.000 16.73
ANISOU  694  N   THR   105 1685    2385    2287   -375   -55  515
ATOM    695  CA  THR   105 -1.115  25.205  40.094 1.000 17.06
ANISOU  695  CA  THR   105 1725    2390    2369   -231  -148 577
ATOM    696  C   THR   105 -2.513  25.631  39.635 1.000 19.55
ANISOU  696  C   THR   105 1768    1817    3842   -160  -346 525
ATOM    697  O   THR   105 -2.680  26.703  39.059 1.000 22.41
ANISOU  697  O   THR   105 2262    2116    4136   -119  -520 842
ATOM    698  CB  THR   105 -0.301  24.857  38.840 1.000 17.57
ANISOU  698  CB  THR   105 1759    2877    2038   -394  -343 377
ATOM    699  OG1 THR   105 -0.865  23.675  38.217 1.000 18.66
ANISOU  699  OG1 THR   105 2035    2449    2607   -140  -458 416
ATOM    700  CG2 THR   105  1.155  24.590  39.178 1.000 18.95
ANISOU  700  CG2 THR   105 1748    2853    2601   -105  -248 296
ATOM    701  N   ALA   106 -3.507  24.751  39.741 1.000 16.52
ANISOU  701  N   ALA   106 1596    2293    2389   -180   -1 298
ATOM    702  CA  ALA   106 -4.846  25.035  39.218 1.000 16.59
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ANISOU  702  CA  ALA  106  1692   1952   2660   -214   -209   2   4   3
ATOM    703  C   ALA  106  -5.848  24.142  39.923  1.000 17.52
ANISOU  703  C   ALA  106  1651   1821   3186    26   -66   5   5   5
ATOM    704  O   ALA  106  -5.479  23.323  40.805  1.000 17.88
ANISOU  704  O   ALA  106  2038   2087   2668    59   -51   3   8   8
ATOM    705  CB  ALA  106  -4.862  24.838  37.713  1.000 20.31
ANISOU  705  CB  ALA  106  2331   2764   2620   -197   -403   4   4   0
ATOM    706  N   ASP  107  -7.149  24.329  39.717  1.000 18.00
ANISOU  706  N   ASP  107  1576   2208   3057    -77   -120   4   9
ATOM    707  CA  ASP  107  -8.217  23.535  40.344  1.000 17.46
ANISOU  707  CA  ASP  107  1563   2191   2881    -83   -472   3   6   3
ATOM    708  C   ASP  107  -8.173  23.753  41.859  1.000 17.74
ANISOU  708  C   ASP  107  1825   2044   2869    447   -269   3   6   2
ATOM    709  O   ASP  107  -8.458  22.854  42.650  1.000 18.95
ANISOU  709  O   ASP  107  1994   2230   2974    167   -133   4   0   2
ATOM    710  CB  ASP  107  -8.089  22.044  39.990  1.000 19.62
ANISOU  710  CB  ASP  107  2213   2300   2942   -394   -727   1   7   3
ATOM    711  CG  ASP  107  -8.370  21.842  38.508  1.000 20.81
ANISOU  711  CG  ASP  107  1952   3093   2862   -138   -532   -  1   4
ATOM    712  OD1 ASP  107  -9.369  22.369  37.976  1.000 25.84
ANISOU  712  OD1 ASP  107  2524   3967   3327    222   -1149   -  2   4   0
ATOM    713  OD2 ASP  107  -7.544  21.168  37.844  1.000 25.86
ANISOU  713  OD2 ASP  107  3314   2989   3523    391    -91   -  8   9
ATOM    714  N   ASN  108  -7.893  24.962  42.298  1.000 18.18
ANISOU  714  N   ASN  108  2049   2075   2786    509    189    1   5   3
ATOM    715  CA  ASN  108  -7.831  25.263  43.740  1.000 17.10
ANISOU  715  CA  ASN  108  1804   1977   2715    266    291    3   2   7
ATOM    716  C   ASN  108  -9.158  25.716  44.314  1.000 17.11
ANISOU  716  C   ASN  108  1705   2061   2734    367     44   1   4   9
ATOM    717  O   ASN  108 -10.103  26.086  43.604  1.000 20.72
ANISOU  717  O   ASN  108  2066   2377   3430    759   -248   2   4   5
ATOM    718  CB  ASN  108  -6.799  26.379  43.969  1.000 19.90
ANISOU  718  CB  ASN  108  1770   2308   3483    186    298   -  1   7   1
ATOM    719  CG  ASN  108  -5.400  25.862  43.717  1.000 17.24
ANISOU  719  CG  ASN  108  1709   2212   2628    200     68   1   8   4
ATOM    720  OD1 ASN  108  -4.986  24.850  44.277  1.000 17.42
ANISOU  720  OD1 ASN  108  2003   1984   2631    109     11   -  6   2
ATOM    721  ND2 ASN  108  -4.644  26.487  42.834  1.000 18.41
ANISOU  721  ND2 ASN  108  2083   2326   2587    -82    300   -  1   8
ATOM    722  N   LEU  109  -9.308  25.509  45.607  1.000 18.09
ANISOU  722  N   LEU  109  1795   2294   2786    349    344   1   0
ATOM    723  CA  LEU  109 -10.532  25.803  46.369  1.000 19.11
ANISOU  723  CA  LEU  109  1763   2200   3296     14   476   -  5   9   8
ATOM    724  C   LEU  109 -10.169  26.790  47.457  1.000 17.40
ANISOU  724  C   LEU  109  1682   1937   2990    251    129   -  2   0   7
ATOM    725  O   LEU  109  -9.443  26.423  48.395  1.000 21.18
ANISOU  725  O   LEU  109  2443   1922   3684    174   -520   2
ATOM    726  CB  LEU  109 -11.100  24.504  46.940  1.000 17.10
ANISOU  726  CB  LEU  109  1888   2142   2469    199    426   -  6   3   0
ATOM    727  CG  LEU  109 -11.520  23.425  45.944  1.000 18.07
ANISOU  727  CG  LEU  109  2515   1943   2409    190   -198   -  3   6   3
ATOM    728  CD1 LEU  109 -11.895  22.124  46.654  1.000 20.06
ANISOU  728  CD1 LEU  109  2842   2406   2375   -331   -175   -  2   0   0
ATOM    729  CD2 LEU  109 -12.630  23.908  45.035  1.000 25.24
ANISOU  729  CD2 LEU  109  3481   2892   3217    306   -992   -  1   1   1
ATOM    730  N   PHE  110 -10.609  28.036  47.313  1.000 17.25
ANISOU  730  N   PHE  110  1584   1926   3045    272    184   -  1   3   2
ATOM    731  CA  PHE  110 -10.235  29.071  48.277  1.000 18.20
ANISOU  731  CA  PHE  110  1751   1816   3346    169    221   -  1   6   0
ATOM    732  C   PHE  110 -11.409  29.567  49.106  1.000 19.93
ANISOU  732  C   PHE  110  2077   1609   3886     71   650   -  3   3   5
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ATOM    733  O   PHE  110 -12.433  29.948  48.494 1.000 24.64
ANISOU  733  O   PHE  110  2051    2461    4851    612    328   -779
ATOM    734  CB  PHE  110  -9.607  30.243  47.520 1.000 19.92
ANISOU  734  CB  PHE  110  2367    1876    3324    224    619    -93
ATOM    735  CG  PHE  110  -8.380  29.986  46.688 1.000 19.47
ANISOU  735  CG  PHE  110  2009    2209    3179   -321    327   -791
ATOM    736  CD1 PHE  110  -7.177  29.680  47.287 1.000 20.59
ANISOU  736  CD1 PHE  110  2071    2080    3674   -274    236   -331
ATOM    737  CD2 PHE  110  -8.437  30.035  45.299 1.000 20.19
ANISOU  737  CD2 PHE  110  2557    1914    3200    112    543   -289
ATOM    738  CE1 PHE  110  -6.034  29.454  46.559 1.000 21.06
ANISOU  738  CE1 PHE  110  2020    2309    3673   -386    165   -622
ATOM    739  CE2 PHE  110  -7.277  29.811  44.547 1.000 20.77
ANISOU  739  CE2 PHE  110  2495    2138    3257    197    504   -398
ATOM    740  CZ  PHE  110  -6.081  29.518  45.175 1.000 22.42
ANISOU  740  CZ  PHE  110  2747    2092    3678    531    339   -357
ATOM    741  N   PRO  111 -11.238  29.718  50.416 1.000 22.11
ANISOU  741  N   PRO  111  2250    2153    3996    -72    871   -620
ATOM    742  CA  PRO  111 -12.287  30.389  51.195 1.000 28.23
ANISOU  742  CA  PRO  111  3895    2210    4621    698   1514   -671
ATOM    743  C   PRO  111 -12.333  31.866  50.784 1.000 30.57
ANISOU  743  C   PRO  111  4528    2026    5061    410    410  -1041
ATOM    744  O   PRO  111 -11.390  32.340  50.115 1.000 31.71
ANISOU  744  O   PRO  111  4040    2236    5774   -179   -597   -12
ATOM    745  CB  PRO  111 -11.799  30.250  52.627 1.000 33.20
ANISOU  745  CB  PRO  111  5609    2702    4303    671   1671   -790
ATOM    746  CG  PRO  111 -10.646  29.326  52.647 1.000 26.04
ANISOU  746  CG  PRO  111  2742    3316    3835   -931   1324   -192
ATOM    747  CD  PRO  111 -10.161  29.149  51.230 1.000 22.15
ANISOU  747  CD  PRO  111  2587    2307    3522   -471    541   -623
ATOM    748  N   SER  112 -13.337  32.641  51.150 1.000 42.13
ANISOU  748  N   SER  112  7176    2716    6115   2074   1731   -526
ATOM    749  CA  SER  112 -13.368  34.026  50.672 1.000 44.05
ANISOU  749  CA  SER  112  6799    2255    7684   1107   -485   -826
ATOM    750  C   SER  112 -13.262  34.157  49.149 1.000 68.28
ANISOU  750  C   SER  112 13632    4498    7812  -1855  -2077   1301
ATOM    751  O   SER  112 -12.347  34.825  48.646 1.000 95.18
ANISOU  751  O   SER  112 15991   11425    8747  -4337    -70   1985
ATOM    752  CB  SER  112 -12.493  35.069  51.349 1.000 39.31
ANISOU  752  CB  SER  112  2247    4535    8153    580   1662   -1437
ATOM    753  OG  SER  112 -11.474  34.624  52.213 1.000 37.49
ANISOU  753  OG  SER  112  7213    2453    4579    806    747   -1152
ATOM    754  N   ASP  114  -9.515  37.322  49.945 1.000 36.40
ANISOU  754  N   ASP  114  3476    2118    8237   1254    403   1484
ATOM    755  CA  ASP  114  -8.205  37.586  50.600 1.000 30.79
ANISOU  755  CA  ASP  114  3503    2856    5340   1229   1240   996
ATOM    756  C   ASP  114  -7.242  36.402  50.648 1.000 26.16
ANISOU  756  C   ASP  114  2581    2404    4955    601   1114   804
ATOM    757  O   ASP  114  -6.031  36.458  50.338 1.000 25.45
ANISOU  757  O   ASP  114  2302    2503    4866    -43    602   131
ATOM    758  CB  ASP  114  -8.595  37.874  52.075 1.000 43.68
ANISOU  758  CB  ASP  114  7509    2783    6304   1157   2727   -210
ATOM    759  CG  ASP  114  -7.391  38.386  52.835 1.000 46.96
ANISOU  759  CG  ASP  114  9259    3225    5359   2517    519   107
ATOM    760  OD1 ASP  114  -6.487  38.959  52.189 1.000 83.49
ANISOU  760  OD1 ASP  114 13724    9866    8132  -6354    650  -3056
ATOM    761  OD2 ASP  114  -7.370  38.262  54.071 1.000113.59
ANISOU  761  OD2 ASP  114 27880   10550    4730  -6984   -159  -2575
ATOM    762  N   PHE  115  -7.831  35.323  51.153 1.000 22.32
ANISOU  762  N   PHE  115  2620    2062    3799    204    954   -114
ATOM    763  CA  PHE  115  -7.115  34.026  51.183 1.000 22.69
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ANISOU  763  CA  PHE  115  2765   1909   3947   118   1093  -187
ATOM    764  C   PHE  115 -6.502  33.754 49.816 1.000 21.49
ANISOU  764  C   PHE  115  2146   2316   3702   305   559   -255
ATOM    765  O   PHE  115 -5.328  33.362 49.758 1.000 20.51
ANISOU  765  O   PHE  115  2153   2011   3627   323   488   -158
ATOM    766  CB  PHE  115 -8.096  32.928 51.638 1.000 20.76
ANISOU  766  CB  PHE  115  2369   1946   3574   -3 563  -473
ATOM    767  CG  PHE  115 -7.496  31.590 51.998 1.000 20.23
ANISOU  767  CG  PHE  115  2369   1854   3463   -155  629   -377
ATOM    768  CD1 PHE  115 -6.915  30.756 51.041 1.000 20.35
ANISOU  768  CD1 PHE  115  2572   1786   3372   -195  112   -756
ATOM    769  CD2 PHE  115 -7.474  31.152 53.309 1.000 21.11
ANISOU  769  CD2 PHE  115  2802   1932   3287   -113  17   -689
ATOM    770  CE1 PHE  115 -6.351  29.538 51.325 1.000 21.09
ANISOU  770  CE1 PHE  115  2502   1728   3784   -295  471   -538
ATOM    771  CE2 PHE  115 -6.938  29.901 53.623 1.000 27.40
ANISOU  771  CE2 PHE  115  5012   1955   3445   444   43   -572
ATOM    772  CZ  PHE  115 -6.332  29.110 52.655 1.000 24.92
ANISOU  772  CZ  PHE  115  3356   1889   4222   50 1519  221
ATOM    773  N   GLU  116 -7.301  33.768 48.757 1.000 21.64
ANISOU  773  N   GLU  116  2396   1835   3990   338   261   -13
ATOM    774  CA  GLU  116 -6.750  33.424 47.444 1.000 20.90
ANISOU  774  CA  GLU  116  2235   1965   3742   224   74  1116
ATOM    775  C   GLU  116 -5.550  34.262 47.054 1.000 20.32
ANISOU  775  C   GLU  116  1978   1899   3845   439  -108  448
ATOM    776  O   GLU  116 -4.544  33.679 46.604 1.000 20.18
ANISOU  776  O   GLU  116  2209   2147   3312   424   73  139
ATOM    777  CB  GLU  116 -7.851  33.561 46.385 1.000 24.22
ANISOU  777  CB  GLU  116  2425   2638   4139  -467  -237  519
ATOM    778  CG  GLU  116 -7.339  33.331 44.980 1.000 23.27
ANISOU  778  CG  GLU  116  2425   2465   3952   -7 -494   750
ATOM    779  CD  GLU  116 -8.401  33.273 43.910 1.000 25.02
ANISOU  779  CD  GLU  116  2695   2703   4107  -510  -739 1509
ATOM    780  OE1 GLU  116 -9.617  33.306 44.207 1.000 34.83
ANISOU  780  OE1 GLU  116  2466   4606   6161  -203  -928 1566
ATOM    781  OE2 GLU  116 -8.001  33.030 42.763 1.000 40.92
ANISOU  781  OE2 GLU  116  4389   7172   3988   -24   -968  693
ATOM    782  N   ARG  117 -5.549  35.571 47.300 1.000 20.60
ANISOU  782  N   ARG  117  2299   1811   3718   382   -10   469
ATOM    783  CA  ARG  117 -4.374  36.374 46.866 1.000 22.65
ANISOU  783  CA  ARG  117  2230   1791   4586   351   107   153
ATOM    784  C   ARG  117 -3.163  35.911 47.648 1.000 21.87
ANISOU  784  C   ARG  117  2269   1865   4178   252   179   97
ATOM    785  O   ARG  117 -2.060  35.789 47.102 1.000 22.10
ANISOU  785  O   ARG  117  2197   2270   3931   216   41  205
ATOM    786  CB  ARG  117 -4.682  37.861 47.105 1.000 29.47
ANISOU  786  CB  ARG  117  2849   1691   6658   259  -555   -1
ATOM    787  CG  ARG  117 -3.485  38.815 47.046 1.000 40.24
ANISOU  787  CG  ARG  117  3905   2567   8818  -819 -1330  -476
ATOM    788  CD  ARG  117 -3.745  40.160 47.716 1.000 52.75
ANISOU  788  CD  ARG  117  4698   2848  12496  -595 -1653 -1669
ATOM    789  NE  ARG  117 -3.934  39.987 49.155 1.000 68.00
ANISOU  789  NE  ARG  117  8247   4719  12872   422  1842 -3441
ATOM    790  CZ  ARG  117 -3.166  40.448 50.126 1.000 78.38
ANISOU  790  CZ  ARG  117 13026   5658  11097   283   448  -2498
ATOM    791  NH1 ARG  117 -2.097  41.186 49.849 1.000 89.01
ANISOU  791  NH1 ARG  117 14218  11488   8115 -3550 -6761  3577
ATOM    792  NH2 ARG  117 -3.479  40.189 51.391 1.000 82.58
ANISOU  792  NH2 ARG  117 16575   2856  11947  2617  2551 -2095
ATOM    793  N   ILE  118 -3.334  35.759 48.954 1.000 21.70
ANISOU  793  N   ILE  118  2319   1797   4127   311   271  -314
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ATOM	794	CA	ILE	118	-2.206	35.425	49.810	1.000	20.99		
ANISOU	794	CA	ILE	118	2546	1624	3805	408	294	-470	
ATOM	795	C	ILE	118	-1.596	34.073	49.475	1.000	18.79		
ANISOU	795	C	ILE	118	2222	1534	3384	218	573	-201	
ATOM	796	O	ILE	118	-0.409	33.858	49.323	1.000	17.27		
ANISOU	796	O	ILE	118	2194	1663	2707	283	351	-136	
ATOM	797	CB	ILE	118	-2.588	35.542	51.293	1.000	22.62		
ANISOU	797	CB	ILE	118	2702	1997	3895	276	416	-856	
ATOM	798	CG1	ILE	118	-2.916	36.995	51.700	1.000	27.54		
ANISOU	798	CG1	ILE	118	5077	1801	3587	503	768	-401	
ATOM	799	CG2	ILE	118	-1.552	34.940	52.206	1.000	23.59		
ANISOU	799	CG2	ILE	118	3084	2274	3606	183	254	-818	
ATOM	800	CD1	ILE	118	-3.493	37.115	53.096	1.000	29.35		
ANISOU	800	CD1	ILE	118	5212	2054	3885	558	1114	-645	
ATOM	801	N	TRP	119	-2.454	33.069	49.341	1.000	17.93		
ANISOU	801	N	TRP	119	2378	1605	2828	147	-80	-269	
ATOM	802	CA	TRP	119	-2.035	31.688	49.103	1.000	16.57		
ANISOU	802	CA	TRP	119	2126	1538	2630	152	-25	-16	
ATOM	803	C	TRP	119	-1.575	31.476	47.676	1.000	16.98		
ANISOU	803	C	TRP	119	2126	1723	2604	269	-91	-51	
ATOM	804	O	TRP	119	-0.700	30.640	47.455	1.000	17.58		
ANISOU	804	O	TRP	119	1892	1674	3113	135	181	63	
ATOM	805	CB	TRP	119	-3.127	30.690	49.591	1.000	18.32		
ANISOU	805	CB	TRP	119	2156	1789	3014	-34	5	-7	
ATOM	806	CG	TRP	119	-2.934	30.457	51.082	1.000	18.27		
ANISOU	806	CG	TRP	119	2208	1711	3025	86	349	56	
ATOM	807	CD1	TRP	119	-3.354	31.273	52.103	1.000	20.36		
ANISOU	807	CD1	TRP	119	2624	2029	3083	156	276	-153	
ATOM	808	CD2	TRP	119	-2.213	29.383	51.683	1.000	18.61		
ANISOU	808	CD2	TRP	119	2049	2055	2967	134	263	110	
ATOM	809	NE1	TRP	119	-2.955	30.773	53.323	1.000	20.55		
ANISOU	809	NE1	TRP	119	2471	2229	3109	92	266	-106	
ATOM	810	CE2	TRP	119	-2.260	29.603	53.073	1.000	20.21		
ANISOU	810	CE2	TRP	119	2529	2258	2893	180	754	297	
ATOM	811	CE3	TRP	119	-1.576	28.258	51.147	1.000	18.29		
ANISOU	811	CE3	TRP	119	2258	1714	2977	42	-70	-20	
ATOM	812	CZ2	TRP	119	-1.636	28.728	53.981	1.000	21.97		
ANISOU	812	CZ2	TRP	119	2876	2526	2945	384	51	-106	
ATOM	813	CZ3	TRP	119	-0.968	27.375	52.045	1.000	19.35		
ANISOU	813	CZ3	TRP	119	2576	2028	2750	187	415	299	
ATOM	814	CH2	TRP	119	-1.026	27.618	53.442	1.000	21.67		
ANISOU	814	CH2	TRP	119	3033	2379	2823	350	250	97	
ATOM	815	N	THR	120	-2.129	32.192	46.701	1.000	16.93		
ANISOU	815	N	THR	120	2023	1833	2577	122	-112	18	
ATOM	816	CA	THR	120	-1.598	32.086	45.342	1.000	17.85		
ANISOU	816	CA	THR	120	1915	2469	2398	222	-371	-324	
ATOM	817	C	THR	120	-0.169	32.587	45.288	1.000	17.15		
ANISOU	817	C	THR	120	2031	1855	2629	241	-155	192	
ATOM	818	O	THR	120	0.700	31.960	44.674	1.000	18.67		
ANISOU	818	O	THR	120	1996	1887	3212	389	-131	177	
ATOM	819	CB	THR	120	-2.487	32.865	44.344	1.000	18.10		
ANISOU	819	CB	THR	120	1951	2204	2720	28	-93	345	
ATOM	820	OG1	THR	120	-3.773	32.238	44.284	1.000	20.49		
ANISOU	820	OG1	THR	120	1807	2801	3179	59	-363	558	
ATOM	821	CG2	THR	120	-1.919	32.803	42.933	1.000	22.46		
ANISOU	821	CG2	THR	120	2438	3266	2830	475	118	705	
ATOM	822	N	GLN	121	0.094	33.708	45.956	1.000	18.62		
ANISOU	822	N	GLN	121	2180	1657	3237	123	-94	213	
ATOM	823	CA	GLN	121	1.466	34.232	45.993	1.000	18.15		
ANISOU	823	CA	GLN	121	2077	1698	3119	77	96	520	
ATOM	824	C	GLN	121	2.412	33.284	46.718	1.000	17.04		

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ANISOU  824  C   GLN  121  2022   1431   3019   192   234   223
ATOM    825  O   GLN  121  3.510  33.047 46.270 1.000 19.32
ANISOU  825  O   GLN  121  1894   1800   3645   93   246   129
ATOM    826  CB  GLN  121  1.490  35.579 46.756 1.000 22.90
ANISOU  826  CB  GLN  121  2520   1479   4702   327   -812  271
ATOM    827  CG  GLN  121  2.888  36.159 46.871 1.000 27.04
ANISOU  827  CG  GLN  121  2949   2062   5262   -346  -400  132
ATOM    828  CD  GLN  121  3.530  36.511 45.535 1.000 31.94
ANISOU  828  CD  GLN  121  3307   2733   6097   983   1031  99
ATOM    829  OE1 GLN  121  4.660  36.085 45.247 1.000 62.76
ANISOU  829  OE1 GLN  121  3009   9570   11267  1758  2366  2029
ATOM    830  NE2 GLN  121  2.859  37.306 44.716 1.000 55.89
ANISOU  830  NE2 GLN  121  6516   7728   6993   2815  1745  3249
ATOM    831  N   TYR  122  1.997  32.791 47.871 1.000 16.87
ANISOU  831  N   TYR  122  2389   1518   2501   71   -161  -54
ATOM    832  CA  TYR  122  2.795  31.881 48.683 1.000 17.97
ANISOU  832  CA  TYR  122  2564   1600   2666   176   -224  -56
ATOM    833  C   TYR  122  3.080  30.600 47.909 1.000 16.83
ANISOU  833  C   TYR  122  1870   1460   3065   -31   -57  -98
ATOM    834  O   TYR  122  4.224  30.129 47.823 1.000 17.67
ANISOU  834  O   TYR  122  1891   1952   2872   189   -220  126
ATOM    835  CB  TYR  122  2.018  31.522 49.960 1.000 18.01
ANISOU  835  CB  TYR  122  2526   1821   2495   2   -325  -55
ATOM    836  CG  TYR  122  2.753  30.619 50.898 1.000 17.89
ANISOU  836  CG  TYR  122  2332   1695   2769   255   -147  -51
ATOM    837  CD1 TYR  122  4.058  30.901 51.323 1.000 21.71
ANISOU  837  CD1 TYR  122  2883   2101   3267   -257  -913  34
ATOM    838  CD2 TYR  122  2.107  29.496 51.415 1.000 21.29
ANISOU  838  CD2 TYR  122  2428   2026   3634   128   -267  468
ATOM    839  CE1 TYR  122  4.680  30.037 52.212 1.000 21.27
ANISOU  839  CE1 TYR  122  2681   2045   3356   140   -725  -210
ATOM    840  CE2 TYR  122  2.746  28.637 52.290 1.000 24.50
ANISOU  840  CE2 TYR  122  3376   1876   4057   -292  -1163  506
ATOM    841  CZ  TYR  122  4.043  28.914 52.675 1.000 22.16
ANISOU  841  CZ  TYR  122  3161   1881   3379   95   -909  -128
ATOM    842  OH  TYR  122  4.699  28.079 53.566 1.000 23.72
ANISOU  842  OH  TYR  122  3471   2398   3142   52   -1005  -56
ATOM    843  N   PHE  123  2.074  30.023 47.253 1.000 16.21
ANISOU  843  N   PHE  123  1794   1571   2793   49   -66  -54
ATOM    844  CA  PHE  123  2.347  28.843 46.397 1.000 15.71
ANISOU  844  CA  PHE  123  1622   1800   2548   34   -142  -103
ATOM    845  C   PHE  123  3.378  29.188 45.337 1.000 15.96
ANISOU  845  C   PHE  123  1681   1304   3078   42   90   3
ATOM    846  O   PHE  123  4.276  28.375 45.037 1.000 15.47
ANISOU  846  O   PHE  123  1703   1437   2739   54   14   -24
ATOM    847  CB  PHE  123  1.036  28.309 45.779 1.000 15.07
ANISOU  847  CB  PHE  123  1460   1364   2904   209   -148  1
ATOM    848  CG  PHE  123  1.241  27.104 44.879 1.000 17.41
ANISOU  848  CG  PHE  123  2090   1620   2906   -39   -179  -238
ATOM    849  CD1 PHE  123  1.170  25.831 45.452 1.000 17.41
ANISOU  849  CD1 PHE  123  1680   1439   3494   72   -119  -255
ATOM    850  CD2 PHE  123  1.490  27.259 43.513 1.000 18.22
ANISOU  850  CD2 PHE  123  1723   2331   2870   -96   -216  -372
ATOM    851  CE1 PHE  123  1.419  24.740 44.636 1.000 19.15
ANISOU  851  CE1 PHE  123  2112   1766   3397   212   -540  -536
ATOM    852  CE2 PHE  123  1.722  26.144 42.717 1.000 19.63
ANISOU  852  CE2 PHE  123  1901   2476   3083   -134  -261  -632
ATOM    853  CZ  PHE  123  1.635  24.868 43.274 1.000 19.40
ANISOU  853  CZ  PHE  123  1525   2424   3421   385   -529  -490
ATOM    854  N   ASP  124  3.164  30.304 44.636 1.000 16.86
ANISOU  854  N   ASP  124  1947   1466   2992   -23   -110  124
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ATOM    855  CA  ASP  124 4.060   30.640  43.544 1.000 17.82
ANISOU  855  CA  ASP  124 2103    1747    2921   405   -24  314
ATOM    856  C   ASP  124 5.490   30.733  44.024 1.000 17.52
ANISOU  856  C   ASP  124 1999    1439    3219   181   94  8 9
ATOM    857  O   ASP  124 6.402   30.324  43.317 1.000 17.18
ANISOU  857  O   ASP  124 2086    1427    3015   34 181 1 7 7
ATOM    858  CB  AASP 124 3.639   31.997  42.942 0.534 21.77
ANISOU  858  CB  AASP 124 3475    2089    2706   642   -372 5 9 7
ATOM    859  CG  AASP 124 4.381   32.304  41.659 0.534 19.28
ANISOU  859  CG  AASP 124 2376    1982    2967   173   -553 4 9 5
ATOM    860  OD1 AASP 124 4.223   31.538  40.678 0.534 21.03
ANISOU  860  OD1 AASP 124 2189    2636    3164   -28   76 2 1
ATOM    861  OD2 AASP 124 5.068   33.348  41.639 0.534 24.96
ANISOU  861  OD2 AASP 124 3681    2052    3752   -296  -1067  8 8 9
ATOM    862  CB  BASP 124 3.632   31.975  42.908 0.466 19.67
ANISOU  862  CB  BASP 124 2559    1993    2923   1003   673  4 4 6
ATOM    863  CG  BASP 124 2.368   31.849  42.089 0.466 22.78
ANISOU  863  CG  BASP 124 3552    3217    1889   872   177  1 1 7 5
ATOM    864  OD1 BASP 124 2.021   30.781  41.545 0.466 27.78
ANISOU  864  OD1 BASP 124 2138    3932    4483   100   503  3 4 7
ATOM    865  OD2 BASP 124 1.703   32.893  41.902 0.466 29.73
ANISOU  865  OD2 BASP 124 3845    3804    3646   1239  -312  1 6 4 4
ATOM    866  N   ARG  125 5.669   31.416  45.153 1.000 16.65
ANISOU  866  N   ARG  125 1942    1350    3032   276   139  2 7 6
ATOM    867  CA  ARG  125 7.038   31.528  45.646 1.000 17.58
ANISOU  867  CA  ARG  125 1918    1819    2944   98 177 2 4 1
ATOM    868  C   ARG  125 7.662   30.188  45.992 1.000 17.38
ANISOU  868  C   ARG  125 1544    1777    3282   -42   40  2 7 3
ATOM    869  O   ARG  125 8.841   29.942  45.754 1.000 18.26
ANISOU  869  O   ARG  125 1639    1669    3631   -97   91  -2 3 3
ATOM    870  CB  ARG  125 7.062   32.468  46.851 1.000 20.45
ANISOU  870  CB  ARG  125 2219    2162    3387   -244   450  -2 7 4
ATOM    871  CG  ARG  125 6.860   33.916  46.344 1.000 28.23
ANISOU  871  CG  ARG  125 3178    2007    5542   147   666  -2 2 2
ATOM    872  CD  ARG  125 6.693   34.891  47.477 1.000 31.76
ANISOU  872  CD  ARG  125 3065    2279    6725   -628  1455  -9 9 3
ATOM    873  NE  ARG  125 6.496   36.221  46.932 1.000 40.81
ANISOU  873  NE  ARG  125 3332    2095    10080  -169  1790  -6 9 4
ATOM    874  CZ  ARG  125 5.970   37.229  47.628 1.000 43.42
ANISOU  874  CZ  ARG  125 4531    2891    9076   839   2072  -1 8 8
ATOM    875  NH1 ARG  125 5.551   37.025  48.866 1.000 38.62
ANISOU  875  NH1 ARG  125 3999    2858    7816   -858  61  -7 0 0
ATOM    876  NH2 ARG  125 5.858   38.382  47.006 1.000 42.11
ANISOU  876  NH2 ARG  125 5319    2652    8030   908   1627  -6 8 1
ATOM    877  N   GLN  126 6.884   29.282  46.557 1.000 15.28
ANISOU  877  N   GLN  126 1876    1527    2404   -70   13  -6 0
ATOM    878  CA  GLN  126 7.376   27.929  46.853 1.000 15.37
ANISOU  878  CA  GLN  126 1726    1625    2488   -54  -312  2 0
ATOM    879  C   GLN  126 7.649   27.150  45.578 1.000 14.21
ANISOU  879  C   GLN  126 1643    1268    2488   -75  -398  7 1
ATOM    880  O   GLN  126 8.682   26.462  45.496 1.000 15.36
ANISOU  880  O   GLN  126 1531    1554    2753   -37  -316  5 3
ATOM    881  CB  GLN  126 6.356   27.158  47.702 1.000 17.40
ANISOU  881  CB  GLN  126 2034    1313    3264   158   293  4 3
ATOM    882  CG  GLN  126 6.336   27.634  49.150 1.000 26.14
ANISOU  882  CG  GLN  126 4503    1690    3739   431   1908  -7 3 2
ATOM    883  CD  GLN  126 5.208   26.998  49.891 1.000 21.95
ANISOU  883  CD  GLN  126 2957    2670    2713   0  -123  1 0 2
ATOM    884  OE1 GLN  126 4.051   27.372  49.730 1.000 42.52
ANISOU  884  OE1 GLN  126 5524    5747    7416   -62  -1272  3 1 4 7
ATOM    885  NE2 GLN  126 5.524   26.003  50.691 1.000 28.32
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ANISOU  885  NE2 GLN  126 2867  3971  3922  -184  -780 1311
ATOM    886  N   TYR  127 6.797  27.287  44.574 1.000 14.52
ANISOU  886  N   TYR  127 1629  1438  2448  -41  -373 -36
ATOM    887  CA  TYR  127 7.039  26.554  43.317 1.000 13.93
ANISOU  887  CA  TYR  127 1563  1455  2277  -136  -234 150
ATOM    888  C   TYR  127 8.289  27.091  42.624 1.000 14.54
ANISOU  888  C   TYR  127 1461  1318  2745  24 -195  190
ATOM    889  O   TYR  127 9.133  26.345  42.140 1.000 14.39
ANISOU  889  O   TYR  127 1611  1580  2277  34 -252  9
ATOM    890  CB  TYR  127 5.801  26.676  42.435 1.000 14.00
ANISOU  890  CB  TYR  127 1510  1549  2258  29 -180  -70
ATOM    891  CG  TYR  127 5.752  25.795  41.202 1.000 12.33
ANISOU  891  CG  TYR  127 1315  1037  2334  -34  -187 45
ATOM    892  CD1 TYR  127 6.483  24.626  41.024 1.000 14.05
ANISOU  892  CD1 TYR  127 1810  1158  2371  7  -84 - 8
ATOM    893  CD2 TYR  127 4.837  26.086  40.206 1.000 15.71
ANISOU  893  CD2 TYR  127 1936  1548  2484  55 -513  2 1
ATOM    894  CE1 TYR  127 6.382  23.829  39.899 1.000 13.10
ANISOU  894  CE1 TYR  127 1450  999  2529  -101  -227  -62
ATOM    895  CE2 TYR  127 4.661  25.322  39.071 1.000 15.07
ANISOU  895  CE2 TYR  127 1928  1620  2177  158  -342 197
ATOM    896  CZ  TYR  127 5.440  24.179  38.934 1.000 13.71
ANISOU  896  CZ  TYR  127 1617  1348  2245  -146  -106 246
ATOM    897  OH  TYR  127 5.337  23.386  37.811 1.000 15.04
ANISOU  897  OH  TYR  127 1682  1755  2279  -87  -60  5 3
ATOM    898  N   THR  128 8.467  28.412  42.616 1.000 14.69
ANISOU  898  N   THR  128 1813  1324  2446  -154  -217 268
ATOM    899  CA  THR  128 9.673  28.984  42.011 1.000 14.67
ANISOU  899  CA  THR  128 1867  1469  2238  -98  -32  195
ATOM    900  C   THR  128 10.921  28.552  42.736 1.000 14.68
ANISOU  900  C   THR  128 1794  1318  2466  59 -123  -285
ATOM    901  O   THR  128 11.900  28.166  42.062 1.000 15.45
ANISOU  901  O   THR  128 1715  1487  2667  -259  153  7 1
ATOM    902  CB  THR  128 9.572  30.544  42.069 1.000 16.02
ANISOU  902  CB  THR  128 2043  1348  2695  -79  59 479
ATOM    903  OG1 THR  128 8.519  30.849  41.162 1.000 19.14
ANISOU  903  OG1 THR  128 2226  2038  3008  195  -23  545
ATOM    904  CG2 THR  128 10.835  31.187  41.582 1.000 19.03
ANISOU  904  CG2 THR  128 2107  1329  3793  125  311  618
ATOM    905  N   ALA  129 10.933  28.564  44.085 1.000 14.21
ANISOU  905  N   ALA  129 1708  1266  2424  -137  -256 -181
ATOM    906  CA  ALA  129 12.108  28.110  44.836 1.000 15.08
ANISOU  906  CA  ALA  129 1670  1435  2624  -118  -210 -225
ATOM    907  C   ALA  129 12.389  26.643  44.562 1.000 14.37
ANISOU  907  C   ALA  129 1706  1299  2457  -159  -203 157
ATOM    908  O   ALA  129 13.552  26.238  44.445 1.000 14.10
ANISOU  908  O   ALA  129 1758  1464  2137  -5 -244  -148
ATOM    909  CB  ALA  129 11.887  28.313  46.313 1.000 17.08
ANISOU  909  CB  ALA  129 2132  1851  2506  -183  -514 -239
ATOM    910  N   SER  130 11.343  25.819  44.553 1.000 14.18
ANISOU  910  N   SER  130 1884  1237  2267  -224  -257 173
ATOM    911  CA  SER  130 11.487  24.375  44.351 1.000 15.44
ANISOU  911  CA  SER  130 1840  1219  2807  -115  -135 - 7
ATOM    912  C   SER  130 12.072  24.114  42.965 1.000 14.45
ANISOU  912  C   SER  130 1345  1481  2665  78 -796  -209
ATOM    913  O   SER  130 13.037  23.329  42.807 1.000 14.43
ANISOU  913  O   SER  130 1327  1382  2773  -74  -246 172
ATOM    914  CB  SER  130 10.120  23.677  44.663 1.000 17.54
ANISOU  914  CB  SER  130 1555  1225  3884  -379  -647 126
ATOM    915  OG  SER  130 9.268  23.888  43.558 1.000 27.32
ANISOU  915  OG  SER  130 2321  3168  4893  11 -1207 865
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ATOM    916  N   ARG  131  11.555  24.772  41.909  1.000  14.47
ANISOU  916  N   ARG  131   1421    1448    2628     161    -384    -166
ATOM    917  CA  ARG  131  12.163  24.598  40.592  1.000  14.91
ANISOU  917  CA  ARG  131   1689    1452    2525      -4    -526    -341
ATOM    918  C   ARG  131  13.605  25.079  40.566  1.000  14.05
ANISOU  918  C   ARG  131   1772    1435    2132     -72    -381    -173
ATOM    919  O   ARG  131  14.448  24.438  39.912  1.000  15.14
ANISOU  919  O   ARG  131   1829    1658    2267    -109    -170    -230
ATOM    920  CB  ARG  131  11.349  25.316  39.514  1.000  15.77
ANISOU  920  CB  ARG  131   1720    1613    2660     -54    -493     -94
ATOM    921  CG  ARG  131   9.970  24.737  39.251  1.000  16.08
ANISOU  921  CG  ARG  131   1703    1695    2711     -13    -647    -141
ATOM    922  CD  ARG  131   9.326  25.390  38.017  1.000  26.56
ANISOU  922  CD  ARG  131   3589    2689    3813    -1037   -2156     745
ATOM    923  NE  ARG  131   9.327  26.831  37.918  1.000  25.91
ANISOU  923  NE  ARG  131   2856    2814    4174     -979   -1682    1413
ATOM    924  CZ  ARG  131   8.472  27.716  38.413  1.000  31.86
ANISOU  924  CZ  ARG  131   3546    2861    5697     -254   -1094    2201
ATOM    925  NH1 ARG  131   7.467  27.244  39.138  1.000  31.34
ANISOU  925  NH1 ARG  131   5127    3636    3144    -1474    -458    -115
ATOM    926  NH2 ARG  131   8.633  29.032  38.235  1.000  40.12
ANISOU  926  NH2 ARG  131   3500    2831    8912     -582   -1620    1802
ATOM    927  N   ALA  132  13.893  26.186  41.236  1.000  13.42
ANISOU  927  N   ALA  132   1683    1385    2033     -85    -652     -24
ATOM    928  CA  ALA  132  15.246  26.751  41.128  1.000  13.38
ANISOU  928  CA  ALA  132   1617    1443    2022     -16    -499     -79
ATOM    929  C   ALA  132  16.225  25.808  41.837  1.000  13.37
ANISOU  929  C   ALA  132   1398    1365    2316     -93    -253    154
ATOM    930  O   ALA  132  17.306  25.586  41.328  1.000  14.43
ANISOU  930  O   ALA  132   1459    1772    2251     -91    -240    106
ATOM    931  CB  ALA  132  15.275  28.084  41.859  1.000  16.52
ANISOU  931  CB  ALA  132   2019    1243    3014     -199    -366    -236
ATOM    932  N   VAL  133  15.893  25.248  42.996  1.000  13.62
ANISOU  932  N   VAL  133   1522    1515    2139     -63    -362      86
ATOM    933  CA  VAL  133  16.839  24.363  43.689  1.000  14.86
ANISOU  933  CA  VAL  133   1902    1566    2179     120    -491     -27
ATOM    934  C   VAL  133  16.923  23.073  42.890  1.000  15.04
ANISOU  934  C   VAL  133   1390    1633    2690      -9    -220    -218
ATOM    935  O   VAL  133  18.036  22.538  42.773  1.000  15.49
ANISOU  935  O   VAL  133   1442    1814    2630      63    -193     -99
ATOM    936  CB  VAL  133  16.545  24.170  45.187  1.000  14.61
ANISOU  936  CB  VAL  133   1528    1789    2234     -45    -391    210
ATOM    937  CG1 VAL  133  15.362  23.267  45.453  1.000  16.78
ANISOU  937  CG1 VAL  133   1544    2123    2708    -249    -437     -81
ATOM    938  CG2 VAL  133  17.766  23.650  45.950  1.000  16.51
ANISOU  938  CG2 VAL  133   1769    1942    2561     -61    -831      64
ATOM    939  N   ALA  134  15.840  22.583  42.270  1.000  13.73
ANISOU  939  N   ALA  134   1605    1451    2160     -75    -397    185
ATOM    940  CA  ALA  134  15.951  21.369  41.451  1.000  14.21
ANISOU  940  CA  ALA  134   1505    1796    2100     116    -570     -33
ATOM    941  C   ALA  134  16.838  21.618  40.246  1.000  15.07
ANISOU  941  C   ALA  134   1766    1511    2450      43    -292      17
ATOM    942  O   ALA  134  17.600  20.750  39.800  1.000  14.36
ANISOU  942  O   ALA  134   1555    1567    2333     -60    -286      52
ATOM    943  CB  ALA  134  14.535  20.925  41.032  1.000  16.97
ANISOU  943  CB  ALA  134   1472    1943    3031      12    -470    -299
ATOM    944  N   ARG  135  16.752  22.808  39.631  1.000  15.48
ANISOU  944  N   ARG  135   1848    1600    2433      14    -341     -20
ATOM    945  CA  ARG  135  17.618  23.153  38.508  1.000  16.07
ANISOU  945  CA  ARG  135   2139    1230    2735     -138    -189     35
ATOM    946  C   ARG  135  19.082  23.057  38.955  1.000  15.70
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ANISOU	946	C	ARG	135	2059	1370	2535	-134	27	1	21
ATOM	947	O	ARG	135	19.928	22.604	38.176	1.000	18.07		
ANISOU	947	O	ARG	135	2317	2014	2534	108	256	2	76
ATOM	948	CB	ARG	135	17.277	24.586	38.096	1.000	21.96		
ANISOU	948	CB	ARG	135	3936	1640	2767	-4	-1480	6	14
ATOM	949	CG	ARG	135	17.571	24.989	36.689	1.000	27.53		
ANISOU	949	CG	ARG	135	5112	2482	2866	816	-610	5	95
ATOM	950	CD	ARG	135	16.930	26.332	36.393	1.000	23.27		
ANISOU	950	CD	ARG	135	3548	2428	2865	148	61	13	71
ATOM	951	NE	ARG	135	15.551	26.309	35.928	1.000	22.68		
ANISOU	951	NE	ARG	135	3488	1575	3556	-116	167	2	97
ATOM	952	CZ	ARG	135	14.520	26.858	36.562	1.000	25.90		
ANISOU	952	CZ	ARG	135	3801	2165	3874	921	-506	-1	79
ATOM	953	NH1	ARG	135	14.708	27.515	37.702	1.000	23.50		
ANISOU	953	NH1	ARG	135	3582	2378	2969	94	137	5	32
ATOM	954	NH2	ARG	135	13.287	26.758	36.035	1.000	24.30		
ANISOU	954	NH2	ARG	135	3520	2441	3272	-101	72	5	82
ATOM	955	N	GLU	136	19.403	23.533	40.149	1.000	15.76		
ANISOU	955	N	GLU	136	1897	1696	2396	-178	17	3	18
ATOM	956	CA	GLU	136	20.752	23.431	40.694	1.000	15.16		
ANISOU	956	CA	GLU	136	1687	1770	2302	-97	279	1	40
ATOM	957	C	GLU	136	21.186	22.001	40.978	1.000	16.74		
ANISOU	957	C	GLU	136	1535	1704	3122	-148	-172	-7	2
ATOM	958	O	GLU	136	22.350	21.637	40.701	1.000	17.42		
ANISOU	958	O	GLU	136	1710	1908	2999	7	30	9	2
ATOM	959	CB	GLU	136	20.957	24.284	41.962	1.000	16.64		
ANISOU	959	CB	GLU	136	2048	1785	2487	53	11	-1	6
ATOM	960	CG	GLU	136	20.762	25.772	41.718	1.000	17.80		
ANISOU	960	CG	GLU	136	2036	1714	3014	-286	-169	1	10
ATOM	961	CD	GLU	136	21.534	26.269	40.513	1.000	20.92		
ANISOU	961	CD	GLU	136	2174	2273	3503	-343	70	4	69
ATOM	962	OE1	GLU	136	22.742	25.987	40.454	1.000	24.97		
ANISOU	962	OE1	GLU	136	2116	2434	4938	-494	531	2	19
ATOM	963	OE2	GLU	136	21.022	27.037	39.672	1.000	24.77		
ANISOU	963	OE2	GLU	136	2975	2618	3817	-708	-133	10	29
ATOM	964	N	VAL	137	20.262	21.172	41.450	1.000	15.34		
ANISOU	964	N	VAL	137	1681	1696	2453	-108	-287	1	13
ATOM	965	CA	VAL	137	20.568	19.750	41.647	1.000	15.92		
ANISOU	965	CA	VAL	137	1755	1802	2493	83	-4	2	10
ATOM	966	C	VAL	137	20.926	19.086	40.326	1.000	15.86		
ANISOU	966	C	VAL	137	1604	1869	2555	-38	-35	6	6
ATOM	967	O	VAL	137	21.905	18.308	40.174	1.000	16.70		
ANISOU	967	O	VAL	137	1617	2118	2609	72	-151	-9	0
ATOM	968	CB	VAL	137	19.358	18.990	42.283	1.000	15.35		
ANISOU	968	CB	VAL	137	1729	1663	2440	8	-29	5	
ATOM	969	CG1	VAL	137	19.607	17.478	42.176	1.000	16.93		
ANISOU	969	CG1	VAL	137	1521	1689	3223	160	-345	9	6
ATOM	970	CG2	VAL	137	19.144	19.420	43.724	1.000	15.43		
ANISOU	970	CG2	VAL	137	1529	2090	2245	-53	-277	1	85
ATOM	971	N	LEU	138	20.149	19.407	39.284	1.000	15.52		
ANISOU	971	N	LEU	138	1625	1735	2535	-105	-61	1	09
ATOM	972	CA	LEU	138	20.378	18.881	37.936	1.000	15.74		
ANISOU	972	CA	LEU	138	1576	1862	2543	-71	15	5	1
ATOM	973	C	LEU	138	21.721	19.396	37.406	1.000	17.42		
ANISOU	973	C	LEU	138	1588	2119	2912	-87	162	-4	5
ATOM	974	O	LEU	138	22.503	18.609	36.846	1.000	19.13		
ANISOU	974	O	LEU	138	1878	2406	2985	186	317	6	2
ATOM	975	CB	LEU	138	19.211	19.248	36.996	1.000	14.70		
ANISOU	975	CB	LEU	138	1592	1642	2349	-50	141	1	90
ATOM	976	CG	LEU	138	17.883	18.541	37.375	1.000	14.38		
ANISOU	976	CG	LEU	138	1657	1409	2399	-44	-4	2	88

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ATOM    977  CD1 LEU   138 16.774  19.122  36.491 1.000 16.13
ANISOU  977  CD1 LEU   138  1743    1848    2539    128   -218  168
ATOM    978  CD2 LEU   138 17.975  17.027  37.156 1.000 17.48
ANISOU  978  CD2 LEU   138  2185    1435    3021   -107   -480  287
ATOM    979  N   ARG   139 21.963  20.708  37.548 1.000 17.44
ANISOU  979  N   ARG   139  1797    2157    2674   -319    238  192
ATOM    980  CA  ARG   139 23.189  21.319  36.996 1.000 19.06
ANISOU  980  CA  ARG   139  2043    2462    2735   -366    482  376
ATOM    981  C   ARG   139 24.419  20.734  37.685 1.000 19.72
ANISOU  981  C   ARG   139  1797    2600    3097   -518    482  376
ATOM    982  O   ARG   139 25.461  20.432  37.094 1.000 20.70
ANISOU  982  O   ARG   139  2046    2469    3350   -288    607  195
ATOM    983  CB  ARG   139 23.152  22.850  37.101 1.000 24.54
ANISOU  983  CB  ARG   139  2525    2403    4396   -402    951  690
ATOM    984  CG  ARG   139 23.886  23.665  36.073 1.000 36.05
ANISOU  984  CG  ARG   139  6517    2967    4212  -2176   1609  140
ATOM    985  CD  ARG   139 23.852  25.148  36.443 1.000 44.95
ANISOU  985  CD  ARG   139  7459    1902    7716   -242  -1324  1930
ATOM    986  NE  ARG   139 22.525  25.727  36.547 1.000 43.27
ANISOU  986  NE  ARG   139  6637    3846    5959   -828  -2173  -698
ATOM    987  CZ  ARG   139 21.821  26.330  35.605 1.000 41.34
ANISOU  987  CZ  ARG   139  5939    4102    5666    497    645  1140
ATOM    988  NH1 ARG   139 22.308  26.436  34.376 1.000 44.01
ANISOU  988  NH1 ARG   139  6564    4146    6011    550   1393  336
ATOM    989  NH2 ARG   139 20.614  26.837  35.833 1.000 45.75
ANISOU  989  NH2 ARG   139  6162    4618    6602    537   1938  2405
ATOM    990  N   ALA   140 24.357  20.566  39.009 1.000 18.77
ANISOU  990  N   ALA   140  1742    2387    3003   -255    145    6    9
ATOM    991  CA  ALA   140 25.532  20.169  39.773 1.000 19.53
ANISOU  991  CA  ALA   140  1583    2641    3197    -28     38  -668
ATOM    992  C   ALA   140 25.932  18.732  39.490 1.000 18.96
ANISOU  992  C   ALA   140  2018    2342    2843    -67     76  -103
ATOM    993  O   ALA   140 27.109  18.335  39.626 1.000 21.36
ANISOU  993  O   ALA   140  1900    2436    3778   -2 472  -80
ATOM    994  CB  ALA   140 25.273  20.345  41.275 1.000 19.74
ANISOU  994  CB  ALA   140  1824    2592    3084    35 0  -360
ATOM    995  N   THR   141 24.958  17.943  39.062 1.000 20.32
ANISOU  995  N   THR   141  2014    2209    3498   -115    305  -138
ATOM    996  CA  THR   141 25.151  16.530  38.717 1.000 17.15
ANISOU  996  CA  THR   141  1870    2039    2609    61 51 218
ATOM    997  C   THR   141 25.269  16.278  37.208 1.000 17.44
ANISOU  997  C   THR   141  1492    2443    2693    21 278 199
ATOM    998  O   THR   141 25.343  15.106  36.792 1.000 19.24
ANISOU  998  O   THR   141  1871    2623    2814    63 579  -63
ATOM    999  CB  THR   141 24.048  15.629  39.290 1.000 16.79
ANISOU  999  CB  THR   141  1708    2261    2410    83 164  3  1
ATOM   1000  OG1 THR   141 22.788  16.012  38.710 1.000 17.18
ANISOU 1000  OG1 THR   141  1894    2235    2399   -101   -53  518
ATOM   1001  CG2 THR   141 23.982  15.734  40.807 1.000 17.83
ANISOU 1001  CG2 THR   141  1521    2878    2377    164   -43    2  0
ATOM   1002  N   GLY   142 25.361  17.301  36.381 1.000 19.69
ANISOU 1002  N   GLY   142  2091    2789    2603   -708    302  297
ATOM   1003  CA  GLY   142 25.517  17.123  34.923 1.000 19.08
ANISOU 1003  CA  GLY   142  1878    2819    2551    128   -163  255
ATOM   1004  C   GLY   142 24.284  16.441  34.313 1.000 18.75
ANISOU 1004  C   GLY   142  1972    2410    2744    0  252  -117
ATOM   1005  O   GLY   142 24.443  15.755  33.315 1.000 22.41
ANISOU 1005  O   GLY   142  2432    2681    3403   -161  571  -680
ATOM   1006  N   THR   143 23.093  16.650  34.854 1.000 17.28
ANISOU 1006  N   THR   143  1895    2002    2667    67 300  244
ATOM   1007  CA  THR   143 21.909  15.932  34.393 1.000 16.88
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ANISOU 1007 CA  THR  143 1953     2006     2456   164   332  6  6
ATOM   1008 C   THR  143 20.998   16.660   33.432 1.000 17.02
ANISOU 1008 C   THR  143 2149     1795     2521    82 196 1 17
ATOM   1009 O   THR  143 20.457   17.713   33.764 1.000 20.30
ANISOU 1009 O   THR  143 2795     1815     3103   344   12 - 2 8
ATOM   1010 CB  THR  143 21.085   15.490   35.623 1.000 16.40
ANISOU 1010 CB  THR  143 1755     2329     2148   -37   95 - 4 4
ATOM   1011 OG1 THR  143 21.922   14.692   36.479 1.000 17.82
ANISOU 1011 OG1 THR  143 2009     2075     2688   -109  39 3 3 7
ATOM   1012 CG2 THR  143 19.887   14.621   35.270 1.000 19.51
ANISOU 1012 CG2 THR  143 1957     2290     3167   -192  -94  1 0 0
ATOM   1013 N   GLU  144 20.742   16.070   32.248 1.000 18.79
ANISOU 1013 N   GLU  144 2138     2203     2800    47 12 - 1 2 1
ATOM   1014 CA  GLU  144 19.729   16.573   31.334 1.000 20.13
ANISOU 1014 CA  GLU  144 2202     2696     2750   -292  -41  3 1 6
ATOM   1015 C   GLU  144 18.637   15.506   31.254 1.000 19.18
ANISOU 1015 C   GLU  144 2255     2614     2418   -292  230  - 1 3 1
ATOM   1016 O   GLU  144 18.827   14.438   30.665 1.000 21.46
ANISOU 1016 O   GLU  144 2268     2442     3446    19 649 - 8 8
ATOM   1017 CB  AGLU 144 20.250   17.061   30.006 0.753 29.50
ANISOU 1017 CB  AGLU 144 3376     4266     3566   -855  206  1 5 0 1
ATOM   1018 CG  AGLU 144 20.195   18.567   29.741 0.753 36.54
ANISOU 1018 CG  AGLU 144 6059     3913     3913   -1728 1769 7 9 5
ATOM   1019 CD  AGLU 144 21.242   19.411   30.426 0.753 33.13
ANISOU 1019 CD  AGLU 144 4189     3432     4966   104   744  8 8 4
ATOM   1020 OE1AGLU 144 21.079   19.690   31.641 0.753 51.91
ANISOU 1020 OE1AGLU 144 3684     11101    4940   -868  -202 - 5 9 0
ATOM   1021 OE2AGLU 144 22.207   19.910   29.807 0.753 50.79
ANISOU 1021 OE2AGLU 144 7949     3695     7653   -3071 3099 -1 2 4 9
ATOM   1022 CB  BGLU 144 20.372   16.724   29.951 0.247 18.36
ANISOU 1022 CB  BGLU 144 868 3091     3016   334   16 2 6 2
ATOM   1023 CG  BGLU 144 21.214   17.988   29.779 0.247 23.54
ANISOU 1023 CG  BGLU 144 1301     3586     4056   -38   595  5 5 8
ATOM   1024 CD  BGLU 144 21.150   18.468   28.336 0.247 33.24
ANISOU 1024 CD  BGLU 144 3589     3975     5064   438   -20  2 0 3 1
ATOM   1025 OE1BGLU 144 20.417   17.818   27.557 0.247 28.68
ANISOU 1025 OE1BGLU 144 3222     4813     2861   389   1729 1 2 8 0
ATOM   1026 OE2BGLU 144 21.814   19.464   27.990 0.247 35.35
ANISOU 1026 OE2BGLU 144 3176     5148     5108   35 1752  1 5 1 6
ATOM   1027 N   PRO  145 17.508   15.724   31.911 1.000 17.11
ANISOU 1027 N   PRO  145 2132     1825     2543   68 62 1 5 8
ATOM   1028 CA  PRO  145 16.396   14.781   31.846 1.000 17.41
ANISOU 1028 CA  PRO  145 2290     1942     2384   -73   400  1  2
ATOM   1029 C   PRO  145 15.966   14.546   30.406 1.000 17.94
ANISOU 1029 C   PRO  145 2386     1955     2475   -116  292  - 1 0 4
ATOM   1030 O   PRO  145 16.068   15.439   29.557 1.000 18.26
ANISOU 1030 O   PRO  145 2271     2196     2472   -272  170  4  5
ATOM   1031 CB  PRO  145 15.250   15.493   32.594 1.000 17.07
ANISOU 1031 CB  PRO  145 2181     1771     2534   35 133 - 1 4 3
ATOM   1032 CG  PRO  145 15.950   16.504   33.464 1.000 17.11
ANISOU 1032 CG  PRO  145 2341     1841     2319   23 -49 - 2 4
ATOM   1033 CD  PRO  145 17.131   16.977   32.649 1.000 17.54
ANISOU 1033 CD  PRO  145 2178     1601     2884   178   -88  3 0 3
ATOM   1034 N   ASP  146 15.490   13.346   30.104 1.000 18.15
ANISOU 1034 N   ASP  146 2140     1965     2790   -60   321  - 1 5 2
ATOM   1035 CA  ASP  146 14.909   13.121   28.775 1.000 18.43
ANISOU 1035 CA  ASP  146 2487     1664     2853   -329  310  - 1 5 6
ATOM   1036 C   ASP  146 13.809   14.154   28.566 1.000 18.07
ANISOU 1036 C   ASP  146 2824     1979     2064   -31   208  - 3 0 9
ATOM   1037 O   ASP  146 12.959   14.333   29.422 1.000 18.29
ANISOU 1037 O   ASP  146 2491     2173     2287   -168  203  - 2 3 0
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ATOM   1038 CB  ASP  146 14.221  11.735  28.717 1.000 23.50
ANISOU 1038 CB  ASP  146 3489    1671    3769   -653  908  -665
ATOM   1039 CG  ASP  146 13.636  11.508  27.334 1.000 34.15
ANISOU 1039 CG  ASP  146 4070    4205    4700   -1004 361  -2386
ATOM   1040 OD1 ASP  146 12.393  11.521  27.138 1.000 44.73
ANISOU 1040 OD1 ASP  146 3971    9175    3849   -2156 683  378
ATOM   1041 OD2 ASP  146 14.421  11.229  26.397 1.000 44.78
ANISOU 1041 OD2 ASP  146 4342    8626    4046   -813  289  -2326
ATOM   1042 N   GLY  147 13.901  14.854  27.450 1.000 19.28
ANISOU 1042 N   GLY  147 2622    2331    2374   -635  -72  113
ATOM   1043 CA  GLY  147 12.916  15.878  27.171 1.000 18.58
ANISOU 1043 CA  GLY  147 2463    2607    1991   -550  -234 -36
ATOM   1044 C   GLY  147 13.355  17.262  27.590 1.000 18.25
ANISOU 1044 C   GLY  147 2511    2432    1993   -335  -138 64
ATOM   1045 O   GLY  147 12.586  18.183  27.289 1.000 20.74
ANISOU 1045 O   GLY  147 2469    2739    2673   -182  -144 205
ATOM   1046 N   GLY  148 14.494  17.357  28.286 1.000 17.38
ANISOU 1046 N   GLY  148 2237    2174    2191   -462  -42  -90
ATOM   1047 CA  GLY  148 15.027  18.658  28.672 1.000 16.72
ANISOU 1047 CA  GLY  148 2308    1789    2255   39  -82 -77
ATOM   1048 C   GLY  148 14.653  19.076  30.085 1.000 13.94
ANISOU 1048 C   GLY  148 1517    1645    2135   77  -201  117
ATOM   1049 O   GLY  148 13.637  18.634  30.694 1.000 16.29
ANISOU 1049 O   GLY  148 1839    1863    2487   -151  -77  285
ATOM   1050 N   VAL  149 15.431  20.003  30.641 1.000 14.93
ANISOU 1050 N   VAL  149 1624    1780    2269   1  -193  -14
ATOM   1051 CA  VAL  149 15.275  20.509  32.017 1.000 14.16
ANISOU 1051 CA  VAL  149 1647    1511    2222   92  -195  86
ATOM   1052 C   VAL  149 13.958  21.218  32.235 1.000 14.37
ANISOU 1052 C   VAL  149 1735    1044    2682   -39   83  188
ATOM   1053 O   VAL  149 13.203  20.970  33.163 1.000 14.63
ANISOU 1053 O   VAL  149 1653    1517    2390   -160  -40  107
ATOM   1054 CB  VAL  149 16.439  21.410  32.417 1.000 14.02
ANISOU 1054 CB  VAL  149 1745    1530    2052   -112  -57  270
ATOM   1055 CG1 VAL  149 16.228  22.101  33.752 1.000 16.48
ANISOU 1055 CG1 VAL  149 2360    1709    2193   -153  -305 87
ATOM   1056 CG2 VAL  149 17.733  20.614  32.482 1.000 17.85
ANISOU 1056 CG2 VAL  149 1618    1937    3226   -59   -52  441
ATOM   1057 N   GLU  150 13.634  22.199  31.371 1.000 15.26
ANISOU 1057 N   GLU  150 1759    1328    2711   186   36 267
ATOM   1058 CA  GLU  150 12.471  23.028  31.687 1.000 14.91
ANISOU 1058 CA  GLU  150 1591    1434    2640   93 13 415
ATOM   1059 C   GLU  150 11.182  22.237  31.553 1.000 16.66
ANISOU 1059 C   GLU  150 1680    1980    2670   -197  113  199
ATOM   1060 O   GLU  150 10.259  22.408  32.379 1.000 15.89
ANISOU 1060 O   GLU  150 1697    1761    2578   29 79 580
ATOM   1061 CB  GLU  150 12.531  24.305  30.874 1.000 17.07
ANISOU 1061 CB  GLU  150 1925    1337    3223   254   189  513
ATOM   1062 CG  GLU  150 13.761  25.167  31.220 1.000 19.00
ANISOU 1062 CG  GLU  150 2483    1212    3523   -65   -95  465
ATOM   1063 CD  GLU  150 13.810  25.624  32.658 1.000 20.32
ANISOU 1063 CD  GLU  150 2444    1746    3532   -130  -24  454
ATOM   1064 OE1 GLU  150 12.781  25.749  33.377 1.000 20.88
ANISOU 1064 OE1 GLU  150 2558    1728    3648   29 58 396
ATOM   1065 OE2 GLU  150 14.913  25.946  33.161 1.000 21.77
ANISOU 1065 OE2 GLU  150 2549    2030    3693   -165  -202 273
ATOM   1066 N   ALA  151 11.050  21.288  30.603 1.000 14.98
ANISOU 1066 N   ALA  151 1649    1710    2334   37 -307  551
ATOM   1067 CA  ALA  151 9.834  20.475  30.543 1.000 15.79
ANISOU 1067 CA  ALA  151 1820    2045    2136   -173  -198 408
ATOM   1068 C   ALA  151 9.748  19.531  31.724 1.000 15.38
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ANISOU 1068  C   ALA 151 1674  1953  2216   165   181  4 4 2
ATOM   1069  O   ALA 151 8.642  19.186 32.184 1.000 16.51
ANISOU 1069  O   ALA 151 1778  1852  2643  -152   110  3 3 0
ATOM   1070  CB  ALA 151 9.823  19.663 29.236 1.000 18.05
ANISOU 1070  CB  ALA 151 1910  2811  2139  -275  -316 1 6 6
ATOM   1071  N   PHE 152 10.893 19.135 32.306 1.000 14.25
ANISOU 1071  N   PHE 152 1858  1132  2423   10 -107  2 6 3
ATOM   1072  CA  PHE 152 10.893 18.285 33.493 1.000 13.42
ANISOU 1072  CA  PHE 152 1457  1291  2353  -102  -34  3 0 4
ATOM   1073  C   PHE 152 10.406 19.056 34.695 1.000 13.93
ANISOU 1073  C   PHE 152 1481  1400  2412  -43   -165 1 9 6
ATOM   1074  O   PHE 152 9.679  18.495 35.558 1.000 14.50
ANISOU 1074  O   PHE 152 1590  1482  2438  -85   25  2 6
ATOM   1075  CB  PHE 152 12.309 17.744 33.728 1.000 13.95
ANISOU 1075  CB  PHE 152 1504  1547  2248  -29   111  4 6 3
ATOM   1076  CG  PHE 152 12.475 16.966 35.011 1.000 14.04
ANISOU 1076  CG  PHE 152 1747  1386  2200   88 -58 2 4 7
ATOM   1077  CD1 PHE 152 12.032 15.653 35.076 1.000 13.90
ANISOU 1077  CD1 PHE 152 1906  1306  2069   165   -36  2 8 1
ATOM   1078  CD2 PHE 152 13.094 17.499 36.127 1.000 15.67
ANISOU 1078  CD2 PHE 152 1927  1770  2259  -155  -115 2 3 3
ATOM   1079  CE1 PHE 152 12.213 14.949 36.263 1.000 14.06
ANISOU 1079  CE1 PHE 152 1669  1507  2165   182   -282 3 4 7
ATOM   1080  CE2 PHE 152 13.323 16.799 37.276 1.000 14.83
ANISOU 1080  CE2 PHE 152 1724  1671  2240   35 -112  1 6 5
ATOM   1081  CZ  PHE 152 12.861 15.522 37.361 1.000 14.86
ANISOU 1081  CZ  PHE 152 1994  1734  1916  -162   99 1 1 3
ATOM   1082  N   LEU 153 10.789 20.324 34.789 1.000 15.25
ANISOU 1082  N   LEU 153 1742  1355  2696   58 110 1 5 4
ATOM   1083  CA  LEU 153 10.454 21.151 35.939 1.000 14.65
ANISOU 1083  CA  LEU 153 1783  1429  2354   -66   16 2 0 3
ATOM   1084  C   LEU 153 9.082  21.791 35.877 1.000 14.47
ANISOU 1084  C   LEU 153 1732  1402  2362   -80   76 1 1
ATOM   1085  O   LEU 153 8.581  22.216 36.953 1.000 15.82
ANISOU 1085  O   LEU 153 1940  1454  2616  -313   312  -1 5 7
ATOM   1086  CB  LEU 153 11.537 22.224 36.165 1.000 16.53
ANISOU 1086  CB  LEU 153 1626  1451  3205   -23   269  - 8 3
ATOM   1087  CG  LEU 153 12.914 21.685 36.514 1.000 15.90
ANISOU 1087  CG  LEU 153 1893  2013  2135  -33   -186 - 3 6
ATOM   1088  CD1 LEU 153 13.922 22.829 36.614 1.000 18.41
ANISOU 1088  CD1 LEU 153 1732  2473  2791  -156  80 -8 7 6
ATOM   1089  CD2 LEU 153 12.863 20.883 37.794 1.000 21.76
ANISOU 1089  CD2 LEU 153 3083  3182  2005   365   261  1 9 3
ATOM   1090  N   ASP 154 8.473  21.866 34.708 1.000 14.41
ANISOU 1090  N   ASP 154 1768  1181  2525   -25   -8 2 9 3
ATOM   1091  CA  ASP 154 7.092  22.373 34.553 1.000 15.90
ANISOU 1091  CA  ASP 154 1665  1615  2760  -195   27 7 6 9
ATOM   1092  C   ASP 154 6.216  21.161 34.814 1.000 14.66
ANISOU 1092  C   ASP 154 1859  1304  2409   -92   143  5 1 5
ATOM   1093  O   ASP 154 5.995  20.368 33.889 1.000 17.30
ANISOU 1093  O   ASP 154 2561  1455  2557   -29   314  2 3 4
ATOM   1094  CB  ASP 154 6.923  22.909 33.125 1.000 18.59
ANISOU 1094  CB  ASP 154 1905  2077  3081   124   269  1 3 1 7
ATOM   1095  CG  ASP 154 5.461  23.157 32.768 1.000 19.87
ANISOU 1095  CG  ASP 154 2029  2531  2990   226   129  1 4 3 6
ATOM   1096  OD1 ASP 154 4.561  23.253 33.639 1.000 19.68
ANISOU 1096  OD1 ASP 154 1949  2209  3318   92 221 4 9 6
ATOM   1097  OD2 ASP 154 5.207  23.189 31.554 1.000 23.73
ANISOU 1097  OD2 ASP 154 2512  3475  3029   246   -137 6 5 3
ATOM   1098  N   CYS 155 5.831  20.904 36.070 1.000 14.25
ANISOU 1098  N   CYS 155 1708  1365  2342  -101  -62  5 4 6
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ATOM   1099 CA  CYS  155 5.418   19.569  36.468 1.000 13.45
ANISOU 1099 CA  CYS  155 1608    1346    2158   -191  4   458
ATOM   1100 C   CYS  155 4.157   19.574  37.302 1.000 12.49
ANISOU 1100 C   CYS  155 1644    1331    1772   -200  -148 6  2
ATOM   1101 O   CYS  155 3.224   20.303  36.941 1.000 14.55
ANISOU 1101 O   CYS  155 1633    1492    2402   -122  -111 4 4 2
ATOM   1102 CB  CYS  155 6.664   18.872  37.098 1.000 14.37
ANISOU 1102 CB  CYS  155 1907    1366    2186   122   -137 2 1 1
ATOM   1103 SG  CYS  155 7.265   19.595  38.641 1.000 14.99
ANISOU 1103 SG  CYS  155 1561    1821    2315   -74   -98  1 8 2
ATOM   1104 N   GLU  156 4.060   18.706  38.316 1.000 12.89
ANISOU 1104 N   GLU  156 1575    1379    1945   -130  29 1 9 4
ATOM   1105 CA  GLU  156 2.788   18.447  39.029 1.000 12.98
ANISOU 1105 CA  GLU  156 1508    1311    2114   -210  21 1 4 0
ATOM   1106 C   GLU  156 2.987   18.676  40.510 1.000 12.34
ANISOU 1106 C   GLU  156 1414    1198    2078   102   24 2 0 4
ATOM   1107 O   GLU  156 2.828   17.757  41.289 1.000 14.89
ANISOU 1107 O   GLU  156 1875    1425    2359   -15   -54  4 4 2
ATOM   1108 CB  GLU  156 2.278   17.047  38.678 1.000 14.48
ANISOU 1108 CB  GLU  156 1968    1323    2213   -279  120  8 7
ATOM   1109 CG  GLU  156 1.855   17.038  37.227 1.000 14.86
ANISOU 1109 CG  GLU  156 1894    1526    2227   -120  95 -1 5 2
ATOM   1110 CD  GLU  156 0.523   17.687  36.932 1.000 17.10
ANISOU 1110 CD  GLU  156 2091    1976    2431   44 -4 1 4 4
ATOM   1111 OE1 GLU  156 -0.204  17.967  37.886 1.000 17.98
ANISOU 1111 OE1 GLU  156 1811    2155    2866   -35   10 -3 5 5
ATOM   1112 OE2 GLU  156 0.214   17.990  35.759 1.000 20.99
ANISOU 1112 OE2 GLU  156 2854    2419    2704   -386  -516 5 6 2
ATOM   1113 N   PRO  157 3.292   19.893  40.958 1.000 12.09
ANISOU 1113 N   PRO  157 1314    1347    1934   12  -48 2 4 9
ATOM   1114 CA  PRO  157 3.576   20.121  42.391 1.000 13.28
ANISOU 1114 CA  PRO  157 1425    1696    1924   -68   117  1 4 7
ATOM   1115 C   PRO  157 2.330   19.996  43.248 1.000 12.87
ANISOU 1115 C   PRO  157 1236    1737    1916   -214  -47  1 2 4
ATOM   1116 O   PRO  157 1.192   20.190  42.744 1.000 13.73
ANISOU 1116 O   PRO  157 1286    1717    2214   -190  -17  1 4 3
ATOM   1117 CB  PRO  157 4.061   21.580  42.407 1.000 13.94
ANISOU 1117 CB  PRO  157 1518    1729    2047   -289  -166 2 4 7
ATOM   1118 CG  PRO  157 3.363   22.184  41.226 1.000 13.06
ANISOU 1118 CG  PRO  157 1558    1518    1887   -32   -158 - 8 8
ATOM   1119 CD  PRO  157 3.494   21.128  40.167 1.000 12.03
ANISOU 1119 CD  PRO  157 1521    1081    1968   -2  -7 1 2 1
ATOM   1120 N   LEU  158 2.542   19.738  44.526 1.000 13.02
ANISOU 1120 N   LEU  158 1554    1493    1899   -124  148  7  3
ATOM   1121 CA  LEU  158 1.438   19.699  45.496 1.000 12.72
ANISOU 1121 CA  LEU  158 1465    1552    1815   -126  -14  3  6
ATOM   1122 C   LEU  158 1.927   20.389  46.772 1.000 12.90
ANISOU 1122 C   LEU  158 1230    1715    1957   -27   -29  - 8 0
ATOM   1123 O   LEU  158 2.975   19.977  47.289 1.000 14.06
ANISOU 1123 O   LEU  158 1374    1666    2304   59 -257  -2 3 6
ATOM   1124 CB  LEU  158 1.046   18.244  45.815 1.000 13.58
ANISOU 1124 CB  LEU  158 1673    1590    1896   -213  57 1 7 1
ATOM   1125 CG  LEU  158 0.044   18.030  46.945 1.000 14.84
ANISOU 1125 CG  LEU  158 1471    1774    2396   -16   262  2 4 2
ATOM   1126 CD1 LEU  158 -1.333  18.635  46.671 1.000 16.96
ANISOU 1126 CD1 LEU  158 1485    2196    2764   5  -148  -4 0 1
ATOM   1127 CD2 LEU  158 -0.142  16.539  47.161 1.000 14.98
ANISOU 1127 CD2 LEU  158 1976    1820    1897   -390  171  7  9
ATOM   1128 N   LEU  159 1.139   21.306  47.283 1.000 13.44
ANISOU 1128 N   LEU  159 1509    1434    2165   43 -87 -1 1 9
ATOM   1129 CA  LEU  159 1.443   21.963  48.571 1.000 13.39
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ANISOU 1129 CA  LEU  159 1438    1555   2095   -36   -80   -91
ATOM   1130 C   LEU  159 0.419   21.494 49.602 1.000 14.49
ANISOU 1130 C   LEU  159 1336    2034   2135   -152  -208  -38
ATOM   1131 O   LEU  159 -0.790  21.596 49.419 1.000 15.09
ANISOU 1131 O   LEU  159 1414    1999   2319   90   -131  90
ATOM   1132 CB  LEU  159 1.390   23.466 48.394 1.000 15.28
ANISOU 1132 CB  LEU  159 1720    1447   2639   55   -325  -197
ATOM   1133 CG  LEU  159 1.484   24.320 49.669 1.000 17.11
ANISOU 1133 CG  LEU  159 2146    1689   2665   363   -332  -343
ATOM   1134 CD1 LEU  159 2.775   24.114 50.453 1.000 18.70
ANISOU 1134 CD1 LEU  159 2276    1759   3070   379   -687  -540
ATOM   1135 CD2 LEU  159 1.312   25.801 49.291 1.000 21.00
ANISOU 1135 CD2 LEU  159 2918    1535   3526   439   -692  -382
ATOM   1136 N   ARG  160 0.916   21.107 50.774 1.000 14.37
ANISOU 1136 N   ARG  160 1688    1709   2063   -101  -186  47
ATOM   1137 CA  ARG  160 0.055   20.747 51.901 1.000 15.61
ANISOU 1137 CA  ARG  160 1726    1990   2217   -64   90   -118
ATOM   1138 C   ARG  160 0.480   21.501 53.155 1.000 15.40
ANISOU 1138 C   ARG  160 1557    2158   2135   -34   -46   -38
ATOM   1139 O   ARG  160 1.639   21.401 53.576 1.000 16.32
ANISOU 1139 O   ARG  160 1528    2508   2164   63   41   -104
ATOM   1140 CB  ARG  160 0.048   19.263 52.227 1.000 16.13
ANISOU 1140 CB  ARG  160 2134    2084   1912   -127  -30   129
ATOM   1141 CG  ARG  160 -0.594  18.410 51.155 1.000 17.17
ANISOU 1141 CG  ARG  160 1963    1934   2628   -140  -212  -60
ATOM   1142 CD  ARG  160 -0.672  16.959 51.627 1.000 18.16
ANISOU 1142 CD  ARG  160 2767    1965   2166   125   -330  -35
ATOM   1143 NE  ARG  160 -1.382  16.102 50.682 1.000 18.11
ANISOU 1143 NE  ARG  160 2408    1775   2699   -56   -308  20
ATOM   1144 CZ  ARG  160 -1.221  14.789 50.581 1.000 16.76
ANISOU 1144 CZ  ARG  160 2191    1748   2428   -97   55   174
ATOM   1145 NH1 ARG  160 -0.326  14.192 51.374 1.000 20.55
ANISOU 1145 NH1 ARG  160 2306    2012   3491   -26   -457  305
ATOM   1146 NH2 ARG  160 -1.908  14.095 49.689 1.000 19.23
ANISOU 1146 NH2 ARG  160 2502    2031   2774   181   -147  -338
ATOM   1147 N   PHE  161 -0.469  22.257 53.755 1.000 15.36
ANISOU 1147 N   PHE  161 1604    2120   2111   -37   -63   -128
ATOM   1148 CA  PHE  161 -0.209  22.975 54.999 1.000 16.25
ANISOU 1148 CA  PHE  161 2173    1774   2227   -71   -187  -89
ATOM   1149 C   PHE  161 -1.030  22.236 56.069 1.000 16.98
ANISOU 1149 C   PHE  161 1980    2432   2041   -217  -161  -162
ATOM   1150 O   PHE  161 -2.248  22.113 55.948 1.000 20.38
ANISOU 1150 O   PHE  161 1981    3291   2473   -190  -191  -72
ATOM   1151 CB  PHE  161 -0.683  24.431 54.862 1.000 19.76
ANISOU 1151 CB  PHE  161 2065    1903   3540   167   355   -198
ATOM   1152 CG  PHE  161 -0.379  25.259 56.109 1.000 23.61
ANISOU 1152 CG  PHE  161 3026    1905   4041   836   -59   -591
ATOM   1153 CD1 PHE  161 -1.194  25.304 57.228 1.000 28.25
ANISOU 1153 CD1 PHE  161 3992    2474   4268   1077  369   -1253
ATOM   1154 CD2 PHE  161 0.807   25.978 56.141 1.000 26.62
ANISOU 1154 CD2 PHE  161 4015    2483   3616   -130  -927  -106
ATOM   1155 CE1 PHE  161 -0.850  25.992 58.383 1.000 35.29
ANISOU 1155 CE1 PHE  161 6873    2097   4437   1538  -135  -1399
ATOM   1156 CE2 PHE  161 1.153   26.723 57.258 1.000 33.63
ANISOU 1156 CE2 PHE  161 4643    3240   4894   1263  -2085  -1268
ATOM   1157 CZ  PHE  161 0.320   26.726 58.363 1.000 36.44
ANISOU 1157 CZ  PHE  161 6071    4282   3493   1455  -2477  -1044
ATOM   1158 N   ARG  162 -0.358  21.767 57.130 1.000 17.59
ANISOU 1158 N   ARG  162 2095    2487   2103   -118  -135  -69
ATOM   1159 CA  ARG  162 -1.072  21.078 58.199 1.000 18.27
ANISOU 1159 CA  ARG  162 2769    2414   1758   6   178  -378
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ATOM   1160 C   ARG  162 -0.880  21.758  59.553 1.000 20.16
ANISOU 1160 C   ARG  162 2110    3341    2210   -36   41 -960
ATOM   1161 O   ARG  162 0.217   22.160  59.893 1.000 19.61
ANISOU 1161 O   ARG  162 2257    2993    2201   -194  -73  -359
ATOM   1162 CB  ARG  162 -0.580  19.640  58.356 1.000 20.81
ANISOU 1162 CB  ARG  162 2958    2275    2675   -129  6  -169
ATOM   1163 CG  ARG  162 -0.843  18.724  57.166 1.000 19.90
ANISOU 1163 CG  ARG  162 3044    2073    2443   -112  254  -38
ATOM   1164 CD  ARG  162 -0.182  17.383  57.393 1.000 28.02
ANISOU 1164 CD  ARG  162 5599    2038    3010   381   -14  114
ATOM   1165 NE  ARG  162 -0.369  16.420  56.326 1.000 27.74
ANISOU 1165 NE  ARG  162 4151    2294    4097   555   -687 -434
ATOM   1166 CZ  ARG  162 -1.278  15.445  56.370 1.000 31.11
ANISOU 1166 CZ  ARG  162 2560    3729    5531   470   -350 -1152
ATOM   1167 NH1 ARG  162 -2.092  15.324  57.403 1.000 42.97
ANISOU 1167 NH1 ARG  162 3475    5906    6946   -579  1019 -2492
ATOM   1168 NH2 ARG  162 -1.329  14.603  55.353 1.000 29.64
ANISOU 1168 NH2 ARG  162 3066    2738    5458   120   -143 -708
ATOM   1169 N   TYR  163 -1.956  21.780  60.311 1.000 19.52
ANISOU 1169 N   TYR  163 2394    2901    2120   147   263  -763
ATOM   1170 CA  TYR  163 -1.943  22.102  61.732 1.000 22.74
ANISOU 1170 CA  TYR  163 3312    3107    2219   369   302  -878
ATOM   1171 C   TYR  163 -2.037  20.800  62.536 1.000 24.20
ANISOU 1171 C   TYR  163 2802    3901    2492   -222  253  -189
ATOM   1172 O   TYR  163 -2.992  20.049  62.274 1.000 28.02
ANISOU 1172 O   TYR  163 2305    4409    3934   -202  -126 399
ATOM   1173 CB  TYR  163 -3.198  22.912  62.114 1.000 28.98
ANISOU 1173 CB  TYR  163 3861    3231    3920   267   1196 -1783
ATOM   1174 CG  TYR  163 -3.342  22.997  63.623 1.000 25.58
ANISOU 1174 CG  TYR  163 2572    3382    3767   543   749  -1204
ATOM   1175 CD1 TYR  163 -2.458  23.826  64.319 1.000 37.32
ANISOU 1175 CD1 TYR  163 3654    6112    4413   -759  884  -2373
ATOM   1176 CD2 TYR  163 -4.315  22.333  64.345 1.000 29.13
ANISOU 1176 CD2 TYR  163 2622    3994    4452   749   1084 -769
ATOM   1177 CE1 TYR  163 -2.546  23.966  65.702 1.000 38.28
ANISOU 1177 CE1 TYR  163 2905    7138    4503   -454  987  -2740
ATOM   1178 CE2 TYR  163 -4.396  22.431  65.726 1.000 37.36
ANISOU 1178 CE2 TYR  163 3220    6336    4640   -273  1997 -1618
ATOM   1179 CZ  TYR  163 -3.500  23.250  66.393 1.000 49.85
ANISOU 1179 CZ  TYR  163 5272    8795    4872   -1810 1593 -2223
ATOM   1180 OH  TYR  163 -3.595  23.365  67.768 1.000 44.81
ANISOU 1180 OH  TYR  163 5246    7368    4413   -222  270  -496
ATOM   1181 N   PHE  164 -1.098  20.651  63.448 1.000 24.84
ANISOU 1181 N   PHE  164 2905    3368    3164   -89   -125 -361
ATOM   1182 CA  PHE  164 -1.045  19.532  64.370 1.000 28.14
ANISOU 1182 CA  PHE  164 3538    3957    3195   223   -163  -30
ATOM   1183 C   PHE  164 -1.360  20.003  65.787 1.000 26.67
ANISOU 1183 C   PHE  164 2964    3937    3234   -473  -194 -257
ATOM   1184 O   PHE  164 -0.540  20.730  66.342 1.000 31.26
ANISOU 1184 O   PHE  164 3119    4888    3869   -959  -260 -519
ATOM   1185 CB  PHE  164 0.347   18.881  64.396 1.000 27.86
ANISOU 1185 CB  PHE  164 3423    3725    3436   76  -199  -32
ATOM   1186 CG  PHE  164 0.744   18.301  63.052 1.000 26.77
ANISOU 1186 CG  PHE  164 2914    3474    3785   -598  74  -275
ATOM   1187 CD1 PHE  164 1.435   19.093  62.143 1.000 26.16
ANISOU 1187 CD1 PHE  164 2827    3836    3278   135   -615 711
ATOM   1188 CD2 PHE  164 0.414   16.996  62.717 1.000 31.24
ANISOU 1188 CD2 PHE  164 4365    2808    4698   349   -298  -96
ATOM   1189 CE1 PHE  164 1.787   18.609  60.894 1.000 30.09
ANISOU 1189 CE1 PHE  164 3609    5052    2771   -148  -1030 641
ATOM   1190 CE2 PHE  164 0.786   16.501  61.475 1.000 38.25
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ANISOU 1190 CE2 PHE 164 6659 4077 3797 -740 -1363 -612
ATOM 1191 CZ PHE 164 1.494 17.298 60.588 1.000 32.74
ANISOU 1191 CZ PHE 164 3189 5078 4172 712 -944 -385
ATOM 1192 N PRO 165 -2.469 19.609 66.379 1.000 30.62
ANISOU 1192 N PRO 165 3876 4009 3751 -1371 344 -508
ATOM 1193 CA PRO 165 -2.670 19.813 67.809 1.000 33.09
ANISOU 1193 CA PRO 165 3299 5764 3510 -190 80 236
ATOM 1194 C PRO 165 -1.459 19.408 68.638 1.000 36.32
ANISOU 1194 C PRO 165 3538 5745 4518 664 -191 -234
ATOM 1195 O PRO 165 -0.776 18.428 68.371 1.000 32.94
ANISOU 1195 O PRO 165 4268 4761 3487 220 501 387
ATOM 1196 CB PRO 165 -3.882 18.929 68.123 1.000 38.44
ANISOU 1196 CB PRO 165 3807 6924 3873 -765 271 827
ATOM 1197 CG PRO 165 -4.635 18.842 66.845 1.000 35.82
ANISOU 1197 CG PRO 165 2595 7020 3995 5 688 -828
ATOM 1198 CD PRO 165 -3.690 19.130 65.710 1.000 33.90
ANISOU 1198 CD PRO 165 3192 5919 3770 -1149 194 169
ATOM 1199 N LEU 178 7.727 7.453 68.180 1.000 64.52
ANISOU 1199 N LEU 178 12297 5376 6843 278 -218 3721
ATOM 1200 CA LEU 178 7.629 8.260 66.973 1.000 43.31
ANISOU 1200 CA LEU 178 10557 2730 3168 -984 -2821 -135
ATOM 1201 C LEU 178 6.159 8.539 66.662 1.000 47.36
ANISOU 1201 C LEU 178 9239 3530 5225 -2598 -1186 1204
ATOM 1202 O LEU 178 5.314 7.659 66.796 1.000 56.53
ANISOU 1202 O LEU 178 11777 5626 4076 -4835 1265 -602
ATOM 1203 CB LEU 178 8.222 7.582 65.746 1.000 55.55
ANISOU 1203 CB LEU 178 11470 3734 5902 -1314 -1197 -1822
ATOM 1204 CG LEU 178 9.662 7.092 65.774 1.000 62.34
ANISOU 1204 CG LEU 178 10812 5116 7760 -1971 194 -443
ATOM 1205 CD1 LEU 178 9.916 6.185 64.579 1.000 54.23
ANISOU 1205 CD1 LEU 178 9626 4989 5988 1878 -3799 511
ATOM 1206 CD2 LEU 178 10.633 8.264 65.773 1.000 66.44
ANISOU 1206 CD2 LEU 178 11265 3454 10526 -1170 4090 -516
ATOM 1207 N ARG 179 5.879 9.751 66.192 1.000 52.90
ANISOU 1207 N ARG 179 7853 3826 8421 102 1230 1031
ATOM 1208 CA ARG 179 4.495 10.033 65.807 1.000 51.26
ANISOU 1208 CA ARG 179 7235 4820 7421 -229 1890 -383
ATOM 1209 C ARG 179 4.242 9.563 64.383 1.000 55.25
ANISOU 1209 C ARG 179 7178 6083 7731 -946 2260 -1134
ATOM 1210 O ARG 179 3.120 9.211 64.021 1.000 58.51
ANISOU 1210 O ARG 179 7036 7628 7565 -1820 3675 -2851
ATOM 1211 CB ARG 179 4.180 11.512 66.040 1.000 41.49
ANISOU 1211 CB ARG 179 6600 4448 4716 -155 1916 1137
ATOM 1212 CG ARG 179 3.293 11.700 67.277 1.000 43.15
ANISOU 1212 CG ARG 179 6120 5908 4367 90 1338 530
ATOM 1213 CD ARG 179 1.888 12.059 66.833 1.000 47.63
ANISOU 1213 CD ARG 179 6180 7453 4463 195 860 -531
ATOM 1214 NE ARG 179 1.459 13.367 67.269 1.000 52.00
ANISOU 1214 NE ARG 179 7384 7834 4539 1669 -1168 -538
ATOM 1215 CZ ARG 179 1.322 14.470 66.556 1.000 64.81
ANISOU 1215 CZ ARG 179 10838 8000 5788 1457 -1107 63
ATOM 1216 NH1 ARG 179 1.637 14.518 65.268 1.000 59.74
ANISOU 1216 NH1 ARG 179 9535 8090 5074 3628 -2691 445
ATOM 1217 NH2 ARG 179 0.907 15.606 67.117 1.000 65.83
ANISOU 1217 NH2 ARG 179 10451 9083 5478 4171 -776 1200
ATOM 1218 N MET 180 5.304 9.501 63.589 1.000 43.96
ANISOU 1218 N MET 180 5383 3769 7550 705 852 -1245
ATOM 1219 CA MET 180 5.264 9.035 62.210 1.000 40.44
ANISOU 1219 CA MET 180 2356 5467 7543 -398 574 -1482
ATOM 1220 C MET 180 6.552 8.258 61.920 1.000 43.91
ANISOU 1220 C MET 180 2731 6220 7733 18 320 -2324
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ATOM	1221	O	MET	180	7.629	8.679	62.327	1.000	39.46		
ANISOU	1221	O	MET	180	2377	5064	7554	-395	906	-912	
ATOM	1222	CB	MET	180	5.129	10.189	61.219	1.000	49.84		
ANISOU	1222	CB	MET	180	2749	7966	8223	-452	-1114	7	2
ATOM	1223	CG	MET	180	5.339	9.818	59.757	1.000	62.58		
ANISOU	1223	CG	MET	180	7280	8911	7587	-2331	-3353	-505	
ATOM	1224	SD	MET	180	4.622	11.015	58.608	1.000	74.24		
ANISOU	1224	SD	MET	180	7480	13510	7216	4918	-262	-905	
ATOM	1225	CE	MET	180	4.501	10.037	57.110	1.000	79.59		
ANISOU	1225	CE	MET	180	6119	20000	4120	-1978	1874	-912	
ATOM	1226	N	ALA	181	6.376	7.112	61.275	1.000	37.44		
ANISOU	1226	N	ALA	181	3523	5646	5055	-271	882	-1132	
ATOM	1227	CA	ALA	181	7.407	6.140	60.986	1.000	37.40		
ANISOU	1227	CA	ALA	181	3980	3980	6250	-625	2048	461	
ATOM	1228	C	ALA	181	8.287	6.591	59.837	1.000	31.49		
ANISOU	1228	C	ALA	181	2975	3842	5149	-32	920	956	
ATOM	1229	O	ALA	181	7.834	7.393	58.997	1.000	30.77		
ANISOU	1229	O	ALA	181	2903	4021	4765	197	-98	164	
ATOM	1230	CB	ALA	181	6.727	4.817	60.620	1.000	42.66		
ANISOU	1230	CB	ALA	181	4105	4284	7820	-1023	1629	557	
ATOM	1231	N	PRO	182	9.541	6.137	59.840	1.000	24.52		
ANISOU	1231	N	PRO	182	2782	4237	2296	-240	-76	320	
ATOM	1232	CA	PRO	182	10.442	6.667	58.820	1.000	20.55		
ANISOU	1232	CA	PRO	182	2612	2870	2326	-335	-117	-65	
ATOM	1233	C	PRO	182	9.958	6.402	57.408	1.000	19.31		
ANISOU	1233	C	PRO	182	2609	2491	2236	-391	48	-86	
ATOM	1234	O	PRO	182	9.448	5.326	57.080	1.000	21.68		
ANISOU	1234	O	PRO	182	2991	2486	2759	-440	-340	-55	
ATOM	1235	CB	PRO	182	11.768	5.939	59.047	1.000	24.98		
ANISOU	1235	CB	PRO	182	2589	3860	3042	-170	-286	153	
ATOM	1236	CG	PRO	182	11.681	5.351	60.393	1.000	28.42		
ANISOU	1236	CG	PRO	182	3352	3582	3863	656	321	1038	
ATOM	1237	CD	PRO	182	10.215	5.210	60.747	1.000	32.21		
ANISOU	1237	CD	PRO	182	3333	4905	4000	-826	-390	1785	
ATOM	1238	N	HIS	183	10.111	7.414	56.561	1.000	19.27		
ANISOU	1238	N	HIS	183	2131	2658	2533	-274	-204	176	
ATOM	1239	CA	HIS	183	9.757	7.306	55.144	1.000	18.01		
ANISOU	1239	CA	HIS	183	1882	2311	2652	-341	-455	346	
ATOM	1240	C	HIS	183	10.749	8.124	54.337	1.000	15.74		
ANISOU	1240	C	HIS	183	1964	1560	2456	-75	-352	128	
ATOM	1241	O	HIS	183	11.355	9.061	54.868	1.000	18.14		
ANISOU	1241	O	HIS	183	2297	2093	2504	-509	-127	-135	
ATOM	1242	CB	HIS	183	8.338	7.781	54.835	1.000	18.66		
ANISOU	1242	CB	HIS	183	1970	2173	2945	-136	-243	371	
ATOM	1243	CG	HIS	183	8.089	9.120	55.447	1.000	26.67		
ANISOU	1243	CG	HIS	183	3100	2751	4281	262	222	-306	
ATOM	1244	ND1	HIS	183	7.884	9.362	56.800	1.000	35.36		
ANISOU	1244	ND1	HIS	183	4432	4078	4926	-1190	1466	-1454	
ATOM	1245	CD2	HIS	183	8.051	10.311	54.821	1.000	33.00		
ANISOU	1245	CD2	HIS	183	4117	2522	5898	1687	-677	-173	
ATOM	1246	CE1	HIS	183	7.739	10.658	56.980	1.000	35.91		
ANISOU	1246	CE1	HIS	183	2611	4468	6565	-472	-625	-2616	
ATOM	1247	NE2	HIS	183	7.829	11.251	55.798	1.000	40.55		
ANISOU	1247	NE2	HIS	183	4375	3417	7614	1821	-1013	-1590	
ATOM	1248	N	TYR	184	10.890	7.778	53.061	1.000	15.68		
ANISOU	1248	N	TYR	184	1973	1551	2434	-124	-470	107	
ATOM	1249	CA	TYR	184	11.605	8.685	52.152	1.000	14.81		
ANISOU	1249	CA	TYR	184	1798	1392	2438	147	-312	145	
ATOM	1250	C	TYR	184	10.572	9.239	51.169	1.000	14.53		
ANISOU	1250	C	TYR	184	1656	1449	2416	-70	-399	98	
ATOM	1251	O	TYR	184	9.468	8.728	51.045	1.000	15.83		

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ANISOU 1251 O   TYR 184 1717    1383    2916   -103  -443 1 5 0
ATOM   1252 CB  TYR 184 12.699  8.004   51.360 1.000 15.66
ANISOU 1252 CB  TYR 184 1686    1323    2943   69 -366  -1 6 8
ATOM   1253 CG  TYR 184 12.383  6.785   50.562 1.000 14.85
ANISOU 1253 CG  TYR 184 1743    1313    2586   109   -567 4  3
ATOM   1254 CD1 TYR 184 12.200  5.540   51.185 1.000 15.49
ANISOU 1254 CD1 TYR 184 1549    1315    3021   -29   -575 1 9 0
ATOM   1255 CD2 TYR 184 12.329  6.836   49.165 1.000 15.89
ANISOU 1255 CD2 TYR 184 1724    1763    2552   55 -27 - 6 4
ATOM   1256 CE1 TYR 184 11.962  4.396   50.442 1.000 15.61
ANISOU 1256 CE1 TYR 184 1695    1244    2992   229   -137 1 1 3
ATOM   1257 CE2 TYR 184 12.130  5.661   48.447 1.000 17.52
ANISOU 1257 CE2 TYR 184 2340    1776    2540   4  83 - 9 0
ATOM   1258 CZ  TYR 184 11.915  4.449   49.083 1.000 16.96
ANISOU 1258 CZ  TYR 184 1695    1736    3014   -156  -480 3  4
ATOM   1259 OH  TYR 184 11.682  3.325   48.310 1.000 18.81
ANISOU 1259 OH  TYR 184 2020    1775    3352   260   -277 - 3 1 2
ATOM   1260 N   ASP 185 10.924  10.330  50.502 1.000 14.36
ANISOU 1260 N   ASP 185 1518    1599    2338   87 -225  2 7 6
ATOM   1261 CA  ASP 185 10.026  11.005  49.574 1.000 13.88
ANISOU 1261 CA  ASP 185 1875    1322    2078   141   -364 - 4 2
ATOM   1262 C   ASP 185 10.240  10.490  48.152 1.000 12.57
ANISOU 1262 C   ASP 185 1182    1385    2211   -160  -77  - 1 3 0
ATOM   1263 O   ASP 185 11.357  10.135  47.824 1.000 14.14
ANISOU 1263 O   ASP 185 1177    1637    2559   -135  146  1 4 0
ATOM   1264 CB  ASP 185 10.294  12.521  49.580 1.000 14.97
ANISOU 1264 CB  ASP 185 1879    1293    2517   121   -186 - 1 5 9
ATOM   1265 CG  ASP 185 9.702   13.155  50.830 1.000 17.61
ANISOU 1265 CG  ASP 185 2680    1659    2351   232   -13  - 1 7 2
ATOM   1266 OD1 ASP 185 9.507   12.466  51.856 1.000 23.69
ANISOU 1266 OD1 ASP 185 3553    3133    2314   443   -302 5 2 1
ATOM   1267 OD2 ASP 185 9.174   14.257  50.742 1.000 24.32
ANISOU 1267 OD2 ASP 185 4063    1730    3449   644   1140 - 1 6
ATOM   1268 N   LEU 186 9.141   10.465  47.382 1.000 12.57
ANISOU 1268 N   LEU 186 1271    1378    2126   -117  -117 - 1 1 7
ATOM   1269 CA  LEU 186 9.169   10.091  45.986 1.000 12.92
ANISOU 1269 CA  LEU 186 1533    1225    2150   -331  -84  - 1 7 5
ATOM   1270 C   LEU 186 9.134   11.292  45.052 1.000 14.12
ANISOU 1270 C   LEU 186 1730    1307    2330   -93   -165 5  5
ATOM   1271 O   LEU 186 8.971   11.173  43.849 1.000 20.12
ANISOU 1271 O   LEU 186 3721    1643    2280   -423  99 9  2
ATOM   1272 CB  LEU 186 8.040   9.106   45.609 1.000 13.72
ANISOU 1272 CB  LEU 186 1509    1310    2393   -270  -375 -  6
ATOM   1273 CG  LEU 186 8.020   7.811   46.438 1.000 15.92
ANISOU 1273 CG  LEU 186 1549    1141    3361   -145  -307 1 6 8
ATOM   1274 CD1 LEU 186 6.929   6.908   45.866 1.000 19.36
ANISOU 1274 CD1 LEU 186 1686    1845    3825   -700  -209 3 9 6
ATOM   1275 CD2 LEU 186 9.369   7.115   46.341 1.000 18.32
ANISOU 1275 CD2 LEU 186 1689    1742    3528   200   -432 1 7 9
ATOM   1276 N   SER 187 9.286   12.494  45.618 1.000 13.60
ANISOU 1276 N   SER 187 1326    1234    2608   -26   -95  1 3 7
ATOM   1277 CA  SER 187 9.388   13.734  44.826 1.000 13.22
ANISOU 1277 CA  SER 187 1489    1197    2338   -54   -68  2  9
ATOM   1278 C   SER 187 10.736  13.853  44.134 1.000 12.79
ANISOU 1278 C   SER 187 1482    1186    2192   -17   -114 - 9 0
ATOM   1279 O   SER 187 11.683  13.076  44.356 1.000 14.50
ANISOU 1279 O   SER 187 1532    1257    2720   76 -224  - 1 1 3
ATOM   1280 CB  SER 187 9.201   14.915  45.811 1.000 12.87
ANISOU 1280 CB  SER 187 1463    1282    2147   164   -154 9  8
ATOM   1281 OG  SER 187 10.296  14.873  46.716 1.000 13.22
ANISOU 1281 OG  SER 187 1589    1420    2015   -34   -143 2 2 4
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ATOM   1282 N   MET 188 10.898 14.844 43.292 1.000 13.44
ANISOU 1282 N   MET 188 1552  1334  2221  -64   -34   -26
ATOM   1283 CA  MET 188 12.215 15.380 42.878 1.000 12.11
ANISOU 1283 CA  MET 188 1508  1261  1833  29   -60   -61
ATOM   1284 C   MET 188 12.853 16.022 44.104 1.000 12.78
ANISOU 1284 C   MET 188 1563  1156  2136  167   -311  -42
ATOM   1285 O   MET 188 13.896 15.550 44.600 1.000 13.40
ANISOU 1285 O   MET 188 1408  1390  2294  116   -264  -26
ATOM   1286 CB  MET 188 12.038 16.300 41.667 1.000 13.66
ANISOU 1286 CB  MET 188 1565  1501  2123  44  -161  207
ATOM   1287 CG  MET 188 13.296 17.095 41.315 1.000 14.05
ANISOU 1287 CG  MET 188 1697  1595  2046  66  150  133
ATOM   1288 SD  MET 188 14.600 15.971 40.752 1.000 14.96
ANISOU 1288 SD  MET 188 1565  1591  2529  109   -81  110
ATOM   1289 CE  MET 188 16.005 17.102 40.686 1.000 17.74
ANISOU 1289 CE  MET 188 1852  2032  2855  -242  505  121
ATOM   1290 N   VAL 189 12.244 17.112 44.616 1.000 12.62
ANISOU 1290 N   VAL 189 1586  1203  2007  103   -147  -134
ATOM   1291 CA  VAL 189 12.565 17.671 45.918 1.000 12.60
ANISOU 1291 CA  VAL 189 1412  1438  1937  -228  -11   -44
ATOM   1292 C   VAL 189 11.285 17.968 46.679 1.000 11.71
ANISOU 1292 C   VAL 189 1328  1294  1825  -170  -171  -49
ATOM   1293 O   VAL 189 10.227 18.099 46.050 1.000 12.56
ANISOU 1293 O   VAL 189 1446  1291  2036  21   -320   -49
ATOM   1294 CB  VAL 189 13.440 18.955 45.856 1.000 12.95
ANISOU 1294 CB  VAL 189 1150  1517  2252  -174  -205  94
ATOM   1295 CG1 VAL 189 14.778 18.637 45.167 1.000 15.54
ANISOU 1295 CG1 VAL 189 1376  2094  2437  -140  161   91
ATOM   1296 CG2 VAL 189 12.730 20.056 45.082 1.000 15.00
ANISOU 1296 CG2 VAL 189 1763  1391  2547  -130  -483  81
ATOM   1297 N   THR 190 11.425 18.067 47.984 1.000 12.18
ANISOU 1297 N   THR 190 1445  1422  1760  -109  -130  10
ATOM   1298 CA  THR 190 10.353 18.454 48.897 1.000 11.98
ANISOU 1298 CA  THR 190 1292  1356  1903  -57   -221  -151
ATOM   1299 C   THR 190 10.879 19.630 49.710 1.000 12.47
ANISOU 1299 C   THR 190 1178  1436  2124  -32   -297  -232
ATOM   1300 O   THR 190 11.959 19.523 50.320 1.000 15.06
ANISOU 1300 O   THR 190 1424  1767  2531  46  -571   -446
ATOM   1301 CB  THR 190 9.913 17.297 49.808 1.000 13.16
ANISOU 1301 CB  THR 190 1509  1605  1886  -168  80   -121
ATOM   1302 OG1 THR 190 9.481 16.201 48.993 1.000 14.47
ANISOU 1302 OG1 THR 190 1693  1469  2334  -100  -25   -194
ATOM   1303 CG2 THR 190 8.778 17.723 50.734 1.000 14.79
ANISOU 1303 CG2 THR 190 1696  1510  2415  73  258   -89
ATOM   1304 N   LEU 191 10.148 20.724 49.732 1.000 12.97
ANISOU 1304 N   LEU 191 1329  1449  2149  23   -21   -286
ATOM   1305 CA  LEU 191 10.511 21.908 50.526 1.000 13.75
ANISOU 1305 CA  LEU 191 1543  1442  2238  78   -206  -301
ATOM   1306 C   LEU 191 9.603  21.964 51.763 1.000 14.47
ANISOU 1306 C   LEU 191 1543  1689  2265  83   -179  -412
ATOM   1307 O   LEU 191 8.370  21.868 51.645 1.000 16.58
ANISOU 1307 O   LEU 191 1517  2486  2297  219   -176  -725
ATOM   1308 CB  LEU 191 10.398 23.212 49.722 1.000 15.37
ANISOU 1308 CB  LEU 191 1717  1444  2680  58   -106   -189
ATOM   1309 CG  LEU 191 11.705 23.578 48.973 1.000 16.10
ANISOU 1309 CG  LEU 191 1747  1688  2680  -128  -113  -135
ATOM   1310 CD1 LEU 191 12.069 22.565 47.906 1.000 16.67
ANISOU 1310 CD1 LEU 191 2034  2093  2209  -23   -64   19
ATOM   1311 CD2 LEU 191 11.570 24.959 48.350 1.000 18.53
ANISOU 1311 CD2 LEU 191 2297  1906  2837  -345  -437  148
ATOM   1312 N   ILE 192 10.199 22.148 52.946 1.000 15.36
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ANISOU 1312 N   ILE 192 1479  2152  2204   -47  -165 -164
ATOM   1313 CA  ILE 192 9.417 22.162 54.194 1.000 15.13
ANISOU 1313 CA  ILE 192 1456  2043  2251  -304  -173 -280
ATOM   1314 C   ILE 192 9.692 23.423 55.010 1.000 15.58
ANISOU 1314 C   ILE 192 1696  1973  2251  -199  -254 -226
ATOM   1315 O   ILE 192 10.836 23.691 55.381 1.000 17.20
ANISOU 1315 O   ILE 192 1856  2449  2229  -307  -341 -574
ATOM   1316 CB  ILE 192 9.722 20.920 55.040 1.000 17.03
ANISOU 1316 CB  ILE 192 2246  1958  2266   -52   325  -303
ATOM   1317 CG1 ILE 192 9.454 19.596 54.317 1.000 19.80
ANISOU 1317 CG1 ILE 192 3040  2010  2473   -71   128  -382
ATOM   1318 CG2 ILE 192 8.995 20.967 56.403 1.000 18.14
ANISOU 1318 CG2 ILE 192 2278  2354  2262   229   290  -258
ATOM   1319 CD1 ILE 192 9.420 18.387 55.235 1.000 31.57
ANISOU 1319 CD1 ILE 192 4658  2114  5222  -398 -1094  765
ATOM   1320 N   GLN 193 8.625 24.172 55.249 1.000 17.04
ANISOU 1320 N   GLN 193 2042  2185  2248   112  -388  -301
ATOM   1321 CA  GLN 193 8.680 25.291 56.201 1.000 17.70
ANISOU 1321 CA  GLN 193 1737  2167  2824  -204  -186  -559
ATOM   1322 C   GLN 193 7.898 24.869 57.443 1.000 19.67
ANISOU 1322 C   GLN 193 1882  2624  2969  -232   211  -840
ATOM   1323 O   GLN 193 7.082 23.942 57.426 1.000 26.60
ANISOU 1323 O   GLN 193 2066  3843  4197  -965  -110 62
ATOM   1324 CB  GLN 193 8.129 26.598 55.643 1.000 23.74
ANISOU 1324 CB  GLN 193 3070  2388  3561   500   -98  -514
ATOM   1325 CG  GLN 193 8.913 27.304 54.559 1.000 28.26
ANISOU 1325 CG  GLN 193 4664  2384  3689   656   209   0
ATOM   1326 CD  GLN 193 8.338 28.665 54.156 1.000 26.30
ANISOU 1326 CD  GLN 193 2868  2943  4181   791    3   111
ATOM   1327 OE1 GLN 193 7.193 28.695 53.688 1.000 45.31
ANISOU 1327 OE1 GLN 193 2826  7147  7241   -51  -616 3173
ATOM   1328 NE2 GLN 193 9.080 29.748 54.345 1.000 30.44
ANISOU 1328 NE2 GLN 193 3609  2588  5368   418  1259  692
ATOM   1329 N   GLN 194 8.241 25.259 58.645 1.000 22.04
ANISOU 1329 N   GLN 194 2926  2758  2690   303   -368   -83
ATOM   1330 CA  GLN 194 7.569 24.793 59.847 1.000 22.68
ANISOU 1330 CA  GLN 194 3144  2617  2855    82  -230  -150
ATOM   1331 C   GLN 194 7.275 26.054 60.663 1.000 22.19
ANISOU 1331 C   GLN 194 2809  2768  2856   117   -396  -320
ATOM   1332 O   GLN 194 7.889 27.100 60.418 1.000 25.26
ANISOU 1332 O   GLN 194 4041  2877  2679  -313   -21  -411
ATOM   1333 CB  GLN 194 8.467 23.943 60.739 1.000 29.21
ANISOU 1333 CB  GLN 194 4493  2707  3899   477   -50   939
ATOM   1334 CG  GLN 194 9.105 22.735 60.083 1.000 28.80
ANISOU 1334 CG  GLN 194 3108  3530  4305   576  -121  494
ATOM   1335 CD  GLN 194 10.296 22.332 60.962 1.000 31.97
ANISOU 1335 CD  GLN 194 2961  5384  3800   824   359  1075
ATOM   1336 OE1 GLN 194 11.421 22.325 60.474 1.000 27.28
ANISOU 1336 OE1 GLN 194 2781  4189  3397   118   133   -249
ATOM   1337 NE2 GLN 194 9.998 22.100 62.232 1.000 29.82
ANISOU 1337 NE2 GLN 194 3540  3958  3832   989   645   800
ATOM   1338 N   THR 195 6.419 25.891 61.658 1.000 23.30
ANISOU 1338 N   THR 195 2407  3058  3387   -211  -235  -720
ATOM   1339 CA  THR 195 6.476 26.833 62.768 1.000 27.14
ANISOU 1339 CA  THR 195 3459  3544  3308    25   -50  -890
ATOM   1340 C   THR 195 6.933 25.997 63.958 1.000 26.11
ANISOU 1340 C   THR 195 3825  2829  3268   558   19 -1247
ATOM   1341 O   THR 195 6.639 24.815 63.994 1.000 28.17
ANISOU 1341 O   THR 195 2973  2916  4815   481   171  -1030
ATOM   1342 CB  THR 195 5.149 27.534 63.069 1.000 25.87
ANISOU 1342 CB  THR 195 3428  2849  3551   -16   -592 -1137
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ATOM   1343 OG1 THR  195 4.111   26.550  63.196 1.000 25.45
ANISOU 1343 OG1 THR  195 3427    3101    3141   -9  -117  -750
ATOM   1344 CG2 THR  195 4.788   28.396  61.847 1.000 31.31
ANISOU 1344 CG2 THR  195 4965    2552    4380   274  -70  -409
ATOM   1345 N   PRO  196 7.604   26.587  64.923 1.000 30.84
ANISOU 1345 N   PRO  196 5225    3191    3300   785  -517 -1542
ATOM   1346 CA  PRO  196 8.101   25.823  66.065 1.000 28.50
ANISOU 1346 CA  PRO  196 3113    3700    4016   -279  -441 -646
ATOM   1347 C   PRO  196 7.018   25.534  67.096 1.000 28.97
ANISOU 1347 C   PRO  196 3581    3326    4102   42  113 -1381
ATOM   1348 O   PRO  196 6.002   26.229  67.192 1.000 32.32
ANISOU 1348 O   PRO  196 4146    4649    3485   901  -180 -1658
ATOM   1349 CB  PRO  196 9.094   26.816  66.694 1.000 29.72
ANISOU 1349 CB  PRO  196 3888    3292    4111   -285  -353 -1072
ATOM   1350 CG  PRO  196 8.533   28.174  66.364 1.000 34.87
ANISOU 1350 CG  PRO  196 6285    3575    3390   421  -1326 -1332
ATOM   1351 CD  PRO  196 7.897   28.035  65.012 1.000 33.20
ANISOU 1351 CD  PRO  196 6407    3606    2600   -598  -494 -1031
ATOM   1352 N   CYS  197 7.289   24.533  67.919 1.000 26.96
ANISOU 1352 N   CYS  197 2739    4038    3465   -113  85 -1227
ATOM   1353 CA  CYS  197 6.519   24.289  69.126 1.000 31.73
ANISOU 1353 CA  CYS  197 3979    4543    3533   -39  721  -1726
ATOM   1354 C   CYS  197 6.803   25.412  70.124 1.000 35.58
ANISOU 1354 C   CYS  197 4213    4819    4486   -480  1126 -2282
ATOM   1355 O   CYS  197 7.917   25.939  70.175 1.000 31.34
ANISOU 1355 O   CYS  197 3817    4845    3246   36  -383  -992
ATOM   1356 CB  CYS  197 6.940   22.962  69.767 1.000 35.79
ANISOU 1356 CB  CYS  197 5913    4705    2980   284  1566 -1423
ATOM   1357 SG  CYS  197 6.553   21.535  68.741 1.000 28.53
ANISOU 1357 SG  CYS  197 3605    4224    3009   50  -5  -452
ATOM   1358 N   ALA  198 5.771   25.791  70.866 1.000 37.27
ANISOU 1358 N   ALA  198 5038    4984    4139   -421  1647 -2070
ATOM   1359 CA  ALA  198 5.983   26.811  71.888 1.000 35.91
ANISOU 1359 CA  ALA  198 6273    4144    3230   910  522  -1230
ATOM   1360 C   ALA  198 6.993   26.328  72.921 1.000 44.30
ANISOU 1360 C   ALA  198 5998    6138    4696   -193  -199 3 3
ATOM   1361 O   ALA  198 7.759   27.127  73.457 1.000 42.85
ANISOU 1361 O   ALA  198 5209    6328    4742   7  490 -555
ATOM   1362 CB  ALA  198 4.671   27.231  72.532 1.000 41.70
ANISOU 1362 CB  ALA  198 7588    5697    2557   2355  1068 -721
ATOM   1363 N   ASN  199 7.036   25.036  73.225 1.000 34.93
ANISOU 1363 N   ASN  199 4027    5975    3270   805  167  -621
ATOM   1364 CA  ASN  199 7.969   24.578  74.264 1.000 33.58
ANISOU 1364 CA  ASN  199 3643    6167    2950   -670  -265 -808
ATOM   1365 C   ASN  199 9.352   24.262  73.718 1.000 31.53
ANISOU 1365 C   ASN  199 4077    5048    2853   384  -420 -855
ATOM   1366 O   ASN  199 10.153  23.667  74.467 1.000 36.33
ANISOU 1366 O   ASN  199 4223    5624    3957   -403  -1305 -126
ATOM   1367 CB  ASN  199 7.441   23.308  74.929 1.000 36.38
ANISOU 1367 CB  ASN  199 4533    5029    4262   859  584  -522
ATOM   1368 CG  ASN  199 7.198   22.180  73.952 1.000 31.28
ANISOU 1368 CG  ASN  199 4030    4863    2993   882  202  178
ATOM   1369 OD1 ASN  199 7.743   22.151  72.853 1.000 37.62
ANISOU 1369 OD1 ASN  199 4693    6272    3330   122  728  -56
ATOM   1370 ND2 ASN  199 6.393   21.190  74.314 1.000 36.42
ANISOU 1370 ND2 ASN  199 3508    6251    4078   -13  1132 -958
ATOM   1371 N   GLY  200 9.616   24.569  72.449 1.000 30.93
ANISOU 1371 N   GLY  200 4342    4232    3179   436  144  -692
ATOM   1372 CA  GLY  200 10.920  24.304  71.866 1.000 35.26
ANISOU 1372 CA  GLY  200 4430    4905    4060   -317  480  -2400
ATOM   1373 C   GLY  200 11.184  22.886  71.429 1.000 36.83
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ANISOU 1373  C   GLY 200 4683   4375   4936   -360  1601 -1460
ATOM   1374  O   GLY 200 12.257 22.566 70.897 1.000 32.71
ANISOU 1374  O   GLY 200 3921   4072   4436   -377  752  -1400
ATOM   1375  N   PHE 201 10.264 21.939 71.588 1.000 28.66
ANISOU 1375  N   PHE 201 3813   4229   2847   145   463  -326
ATOM   1376  CA  PHE 201 10.491 20.575 71.106 1.000 27.55
ANISOU 1376  CA  PHE 201 3190   4337   2943   -233  219  -672
ATOM   1377  C   PHE 201 10.752 20.553 69.600 1.000 24.89
ANISOU 1377  C   PHE 201 2943   3682   2832   190   -268 -379
ATOM   1378  O   PHE 201 9.994  21.255 68.910 1.000 28.22
ANISOU 1378  O   PHE 201 3583   3184   3957   10  -421  277
ATOM   1379  CB  PHE 201 9.250  19.729 71.413 1.000 30.46
ANISOU 1379  CB  PHE 201 3153   4862   3560   -371  -40  -73
ATOM   1380  CG  PHE 201 9.425  18.262 71.027 1.000 34.89
ANISOU 1380  CG  PHE 201 4015   4609   4632   -772  162  89
ATOM   1381  CD1 PHE 201 10.395 17.472 71.605 1.000 31.18
ANISOU 1381  CD1 PHE 201 3436   4103   4310   -875  -93  -1105
ATOM   1382  CD2 PHE 201 8.613  17.681 70.078 1.000 28.84
ANISOU 1382  CD2 PHE 201 2979   4019   3960   329   612  -107
ATOM   1383  CE1 PHE 201 10.564 16.160 71.240 1.000 37.73
ANISOU 1383  CE1 PHE 201 6489   3608   4239   -1078 -1475 -500
ATOM   1384  CE2 PHE 201 8.761  16.363 69.679 1.000 31.78
ANISOU 1384  CE2 PHE 201 4327   3911   3838   652   250  119
ATOM   1385  CZ  PHE 201 9.755  15.606 70.265 1.000 29.78
ANISOU 1385  CZ  PHE 201 3705   3397   4211   6  -638  -849
ATOM   1386  N   VAL 202 11.706 19.751 69.144 1.000 23.51
ANISOU 1386  N   VAL 202 2671   3392   2868   -292  -1 -578
ATOM   1387  CA  VAL 202 11.969 19.626 67.706 1.000 26.37
ANISOU 1387  CA  VAL 202 3025   4050   2946   -667  57 -724
ATOM   1388  C   VAL 202 11.423 18.283 67.198 1.000 22.75
ANISOU 1388  C   VAL 202 2729   3348   2567   96  -120  -435
ATOM   1389  O   VAL 202 11.880 17.190 67.541 1.000 28.71
ANISOU 1389  O   VAL 202 3249   3799   3859   119  31 661
ATOM   1390  CB  VAL 202 13.476 19.721 67.415 1.000 24.99
ANISOU 1390  CB  VAL 202 3060   3427   3008   -278  283  152
ATOM   1391  CG1 VAL 202 13.715 19.464 65.938 1.000 27.70
ANISOU 1391  CG1 VAL 202 4642   2577   3307   87 1014  - 3
ATOM   1392  CG2 VAL 202 14.050 21.071 67.823 1.000 26.80
ANISOU 1392  CG2 VAL 202 2826   3868   3487   -490  474  -398
ATOM   1393  N   SER 203 10.405 18.402 66.333 1.000 24.10
ANISOU 1393  N   SER 203 2194   3607   3356   -31  -179 -528
ATOM   1394  CA  SER 203 9.634  17.231 65.940 1.000 23.70
ANISOU 1394  CA  SER 203 2373   3584   3046   -290  308  -533
ATOM   1395  C   SER 203 10.168 16.511 64.710 1.000 21.28
ANISOU 1395  C   SER 203 2173   3041   2871   46 227 - 42
ATOM   1396  O   SER 203 10.159 15.285 64.640 1.000 27.60
ANISOU 1396  O   SER 203 4105   3097   3284   -482  1010 -249
ATOM   1397  CB  SER 203 8.148  17.571 65.685 1.000 29.06
ANISOU 1397  CB  SER 203 2251   3790   5001   -180  203  -2064
ATOM   1398  OG  SER 203 7.584  18.175 66.843 1.000 32.55
ANISOU 1398  OG  SER 203 3840   4298   4231   920  1099 -382
ATOM   1399  N   LEU 204 10.688 17.233 63.724 1.000 22.46
ANISOU 1399  N   LEU 204 2476   3013   3043   79 450 - 46
ATOM   1400  CA  LEU 204 11.166 16.530 62.544 1.000 20.26
ANISOU 1400  CA  LEU 204 2200   2831   2667   45 -18 - 15
ATOM   1401  C   LEU 204 12.595 16.038 62.747 1.000 18.83
ANISOU 1401  C   LEU 204 2151   2528   2477   -75  60 - 1
ATOM   1402  O   LEU 204 13.443 16.783 63.251 1.000 20.47
ANISOU 1402  O   LEU 204 2333   2386   3059   -303 -195 404
ATOM   1403  CB  LEU 204 11.103 17.486 61.362 1.000 21.42
ANISOU 1403  CB  LEU 204 2718   2548   2871   311  -16  - 8
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ATOM   1404 CG  LEU  204 9.769   18.188  61.079 1.000 33.57
ANISOU 1404 CG  LEU  204 2820    4319    5617    177   -1316 1172
ATOM   1405 CD1 LEU  204 9.797   18.747  59.660 1.000 36.19
ANISOU 1405 CD1 LEU  204 4402    3807    5540    1276  -1167 987
ATOM   1406 CD2 LEU  204 8.581   17.234  61.219 1.000 37.76
ANISOU 1406 CD2 LEU  204 3058    5328    5960    -526  -1896 686
ATOM   1407 N   GLN  205 12.864  14.836  62.284 1.000 20.33
ANISOU 1407 N   GLN  205 2518    2644    2563    104   -31  -129
ATOM   1408 CA  GLN  205 14.209  14.247  62.335 1.000 18.88
ANISOU 1408 CA  GLN  205 2522    2225    2425    -6 -181  3 6
ATOM   1409 C   GLN  205 14.512  13.504  61.036 1.000 18.19
ANISOU 1409 C   GLN  205 1986    2383    2543    -143  -188 -80
ATOM   1410 O   GLN  205 13.577  13.033  60.408 1.000 19.87
ANISOU 1410 O   GLN  205 1974    3063    2514    -125  -212 -237
ATOM   1411 CB  GLN  205 14.296  13.267  63.493 1.000 24.25
ANISOU 1411 CB  GLN  205 3948    2716    2548    202   -343 296
ATOM   1412 CG  GLN  205 14.164  13.948  64.856 1.000 30.64
ANISOU 1412 CG  GLN  205 4099    5159    2382    850   -327 -89
ATOM   1413 CD  GLN  205 14.744  13.078  65.948 1.000 28.28
ANISOU 1413 CD  GLN  205 4473    3633    2640    -161  -1015 -390
ATOM   1414 OE1 GLN  205 14.307  11.921  66.041 1.000 37.69
ANISOU 1414 OE1 GLN  205 5733    5073    3515    -2145 -699 478
ATOM   1415 NE2 GLN  205 15.710  13.553  66.711 1.000 40.53
ANISOU 1415 NE2 GLN  205 6798    4417    4185    -1341 -2865 323
ATOM   1416 N   ALA  206 15.752  13.471  60.576 1.000 18.52
ANISOU 1416 N   ALA  206 2070    2199    2769    -240  -13  4
ATOM   1417 CA  ALA  206 16.152  12.700  59.405 1.000 18.42
ANISOU 1417 CA  ALA  206 2074    2351    2575    -100  -158 2 3
ATOM   1418 C   ALA  206 17.343  11.802  59.738 1.000 17.41
ANISOU 1418 C   ALA  206 2107    2158    2350    -185  -254 -17
ATOM   1419 O   ALA  206 18.123  12.203  60.613 1.000 20.67
ANISOU 1419 O   ALA  206 2469    2410    2973    -48   -711 -396
ATOM   1420 CB  ALA  206 16.637  13.599  58.270 1.000 18.77
ANISOU 1420 CB  ALA  206 2119    2310    2703    156   -65  147
ATOM   1421 N   GLU  207 17.492  10.764  58.931 1.000 18.09
ANISOU 1421 N   GLU  207 2092    2101    2680    -249  -496 -162
ATOM   1422 CA  GLU  207 18.710  9.944   58.966 1.000 19.48
ANISOU 1422 CA  GLU  207 2210    2091    3100    -73   -432 -44
ATOM   1423 C   GLU  207 19.851  10.730  58.320 1.000 19.98
ANISOU 1423 C   GLU  207 2018    2233    3342    220   -560 544
ATOM   1424 O   GLU  207 19.732  11.068  57.143 1.000 20.33
ANISOU 1424 O   GLU  207 2000    2753    2970    5  -471  8 9
ATOM   1425 CB  GLU  207 18.566  8.623   58.214 1.000 24.03
ANISOU 1425 CB  GLU  207 3401    1784    3946    316   -1226 6 1
ATOM   1426 CG  GLU  207 19.757  7.674   58.295 1.000 24.35
ANISOU 1426 CG  GLU  207 3223    1907    4121    354   93 467
ATOM   1427 CD  GLU  207 20.730  7.791   57.129 1.000 31.69
ANISOU 1427 CD  GLU  207 2729    5178    4134    -1218 -175 122
ATOM   1428 OE1 GLU  207 20.376  7.611   55.943 1.000 26.97
ANISOU 1428 OE1 GLU  207 2849    3404    3993    31 -256  309
ATOM   1429 OE2 GLU  207 21.908  8.121   57.407 1.000 30.70
ANISOU 1429 OE2 GLU  207 2484    3416    5764    -233  -342 -1168
ATOM   1430 N   VAL  208 20.919  10.936  59.078 1.000 18.53
ANISOU 1430 N   VAL  208 2020    2112    2907    130   -362 320
ATOM   1431 CA  VAL  208 22.150  11.547  58.541 1.000 19.53
ANISOU 1431 CA  VAL  208 2044    2238    3137    39 -476  630
ATOM   1432 C   VAL  208 23.341  10.755  59.088 1.000 21.95
ANISOU 1432 C   VAL  208 2040    2792    3507    225   -461 797
ATOM   1433 O   VAL  208 23.460  10.663  60.314 1.000 23.82
ANISOU 1433 O   VAL  208 2262    3240    3547    -40   -858 825
ATOM   1434 CB  VAL  208 22.271  13.027  58.905 1.000 19.72
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ANISOU	1434	CB	VAL	208	1918	2429	3145	-47	-308	311
ATOM	1435	CG1	VAL	208	23.524	13.626	58.281	1.000	23.14	
ANISOU	1435	CG1	VAL	208	2524	2374	3895	-202	284	349
ATOM	1436	CG2	VAL	208	21.030	13.812	58.469	1.000	19.47	
ANISOU	1436	CG2	VAL	208	2462	2279	2658	232	-667	-87
ATOM	1437	N	GLY	209	24.180	10.169	58.246	1.000	23.88	
ANISOU	1437	N	GLY	209	2500	2449	4123	465	-711	36
ATOM	1438	CA	GLY	209	25.306	9.374	58.773	1.000	26.42	
ANISOU	1438	CA	GLY	209	1987	3599	4450	460	-487	516
ATOM	1439	C	GLY	209	24.905	8.250	59.695	1.000	30.01	
ANISOU	1439	C	GLY	209	3469	3240	4693	238	-1422	732
ATOM	1440	O	GLY	209	25.609	7.835	60.629	1.000	31.45	
ANISOU	1440	O	GLY	209	4053	4458	3438	1225	-897	83
ATOM	1441	N	GLY	210	23.691	7.702	59.523	1.000	26.64	
ANISOU	1441	N	GLY	210	3165	3214	3744	259	-86	350
ATOM	1442	CA	GLY	210	23.263	6.585	60.360	1.000	29.78	
ANISOU	1442	CA	GLY	210	4603	3091	3619	-55	-997	584
ATOM	1443	C	GLY	210	22.622	6.993	61.663	1.000	38.28	
ANISOU	1443	C	GLY	210	5827	4212	4507	-2536	732	50
ATOM	1444	O	GLY	210	22.160	6.187	62.481	1.000	41.45	
ANISOU	1444	O	GLY	210	4152	6516	5082	-1874	-567	2346
ATOM	1445	N	ALA	211	22.512	8.274	61.976	1.000	32.81	
ANISOU	1445	N	ALA	211	4803	4625	3037	1372	-1177	632
ATOM	1446	CA	ALA	211	21.828	8.603	63.235	1.000	35.62	
ANISOU	1446	CA	ALA	211	3993	5958	3584	1061	-610	970
ATOM	1447	C	ALA	211	20.663	9.543	62.940	1.000	31.43	
ANISOU	1447	C	ALA	211	3508	4737	3699	302	69	1854
ATOM	1448	O	ALA	211	20.652	10.097	61.858	1.000	28.28	
ANISOU	1448	O	ALA	211	3661	4062	3020	-571	-551	1010
ATOM	1449	CB	ALA	211	22.812	9.278	64.170	1.000	41.36	
ANISOU	1449	CB	ALA	211	3644	8904	3169	1372	-18	-791
ATOM	1450	N	PHE	212	19.682	9.676	63.825	1.000	36.68	
ANISOU	1450	N	PHE	212	5211	4237	4489	1166	1265	2171
ATOM	1451	CA	PHE	212	18.620	10.654	63.641	1.000	28.82	
ANISOU	1451	CA	PHE	212	4490	3167	3293	263	504	1037
ATOM	1452	C	PHE	212	19.100	12.023	64.124	1.000	34.72	
ANISOU	1452	C	PHE	212	6746	3760	2685	-248	-539	776
ATOM	1453	O	PHE	212	19.667	12.191	65.210	1.000	39.12	
ANISOU	1453	O	PHE	212	6144	5384	3335	-549	-1129	1220
ATOM	1454	CB	PHE	212	17.358	10.219	64.388	1.000	45.35	
ANISOU	1454	CB	PHE	212	6376	2569	8288	1348	3748	2314
ATOM	1455	N	THR	213	18.906	13.008	63.271	1.000	26.30	
ANISOU	1455	N	THR	213	4134	2738	3122	662	-581	100
ATOM	1456	CA	THR	213	19.424	14.359	63.433	1.000	25.08	
ANISOU	1456	CA	THR	213	3587	2852	3089	767	-810	-323
ATOM	1457	C	THR	213	18.190	15.283	63.400	1.000	23.81	
ANISOU	1457	C	THR	213	2835	2652	3560	215	-855	-643
ATOM	1458	O	THR	213	17.329	15.137	62.517	1.000	21.40	
ANISOU	1458	O	THR	213	2640	2269	3223	-328	-580	-179
ATOM	1459	CB	THR	213	20.398	14.759	62.308	1.000	27.60	
ANISOU	1459	CB	THR	213	3155	3220	4113	189	-356	-798
ATOM	1460	OG1	THR	213	21.673	14.084	62.374	1.000	32.00	
ANISOU	1460	OG1	THR	213	3582	4220	4356	746	-410	520
ATOM	1461	CG2	THR	213	20.735	16.254	62.355	1.000	29.45	
ANISOU	1461	CG2	THR	213	4422	3320	3448	-106	-1265	-204
ATOM	1462	N	ASP	214	18.119	16.177	64.371	1.000	21.05	
ANISOU	1462	N	ASP	214	2790	2236	2972	-82	-380	-142
ATOM	1463	CA	ASP	214	17.001	17.110	64.462	1.000	20.61	
ANISOU	1463	CA	ASP	214	2742	2095	2993	-117	-898	-379
ATOM	1464	C	ASP	214	16.994	18.030	63.226	1.000	20.58	
ANISOU	1464	C	ASP	214	2373	2525	2923	182	-169	-237

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ATOM   1465 O   ASP  214 18.018  18.430  62.678 1.000 23.02
ANISOU 1465 O   ASP  214 2461    2883    3404   -167  -52  -572
ATOM   1466 CB  ASP  214 17.205  18.058  65.637 1.000 23.54
ANISOU 1466 CB  ASP  214 3304    2607    3032   -92   -748 -668
ATOM   1467 CG  ASP  214 16.915  17.506  67.004 1.000 24.93
ANISOU 1467 CG  ASP  214 3545    2850    3079   450   -417 -614
ATOM   1468 OD1 ASP  214 16.357  16.395  67.113 1.000 29.17
ANISOU 1468 OD1 ASP  214 4134    3070    3878   202   -705 262
ATOM   1469 OD2 ASP  214 17.276  18.191  67.990 1.000 34.38
ANISOU 1469 OD2 ASP  214 6917    3040    3107   1017  -1413 -736
ATOM   1470 N   LEU  215 15.802  18.452  62.859 1.000 20.74
ANISOU 1470 N   LEU  215 2426    2372    3081   86 -60 306
ATOM   1471 CA  LEU  215 15.568  19.401  61.796 1.000 20.55
ANISOU 1471 CA  LEU  215 2895    2013    2899   -202  -178 141
ATOM   1472 C   LEU  215 14.724  20.552  62.332 1.000 19.02
ANISOU 1472 C   LEU  215 2482    2240    2504   -142  -34  321
ATOM   1473 O   LEU  215 13.510  20.613  62.142 1.000 22.39
ANISOU 1473 O   LEU  215 2635    2483    3389   -160  -475 573
ATOM   1474 CB  LEU  215 14.826  18.722  60.650 1.000 22.04
ANISOU 1474 CB  LEU  215 2778    2510    3086   -140  -261 -65
ATOM   1475 CG  LEU  215 15.598  17.502  60.128 1.000 25.25
ANISOU 1475 CG  LEU  215 3680    2829    3085   85 -166  -402
ATOM   1476 CD1 LEU  215 14.680  16.736  59.174 1.000 27.12
ANISOU 1476 CD1 LEU  215 4886    2934    2482   419   -1128 -65
ATOM   1477 CD2 LEU  215 16.881  18.046  59.510 1.000 30.76
ANISOU 1477 CD2 LEU  215 3434    3089    5165   1003  524  561
ATOM   1478 N   PRO  216 15.383  21.433  63.078 1.000 19.68
ANISOU 1478 N   PRO  216 2407    2191    2879   -157  148  103
ATOM   1479 CA  PRO  216 14.665  22.534  63.708 1.000 22.42
ANISOU 1479 CA  PRO  216 2869    2812    2836   272   10  -228
ATOM   1480 C   PRO  216 14.201  23.576  62.698 1.000 25.36
ANISOU 1480 C   PRO  216 4118    2433    3086   566   -131 -315
ATOM   1481 O   PRO  216 14.700  23.759  61.586 1.000 24.67
ANISOU 1481 O   PRO  216 3682    2406    3284   187   -176 -26
ATOM   1482 CB  PRO  216 15.693  23.092  64.676 1.000 23.88
ANISOU 1482 CB  PRO  216 3108    3049    2917   -216  116  -318
ATOM   1483 CG  PRO  216 17.033  22.701  64.146 1.000 28.31
ANISOU 1483 CG  PRO  216 2994    2996    4766   -88   -117 -1454
ATOM   1484 CD  PRO  216 16.807  21.405  63.436 1.000 24.55
ANISOU 1484 CD  PRO  216 2353    1777    5197   -436  -83  -348
ATOM   1485 N   TYR  217 13.154  24.287  63.102 1.000 24.13
ANISOU 1485 N   TYR  217 3237    2704    3229   244   -631 -511
ATOM   1486 CA  TYR  217 12.676  25.510  62.462 1.000 26.08
ANISOU 1486 CA  TYR  217 2514    2899    4498   104   -592 3  9
ATOM   1487 C   TYR  217 13.824  26.516  62.369 1.000 25.24
ANISOU 1487 C   TYR  217 3049    2948    3592   -257  -506 -538
ATOM   1488 O   TYR  217 14.570  26.675  63.340 1.000 31.78
ANISOU 1488 O   TYR  217 4114    2863    5096   -352  -2151 564
ATOM   1489 CB  TYR  217 11.559  26.103  63.315 1.000 25.97
ANISOU 1489 CB  TYR  217 2747    2773    4346   86 -615  -167
ATOM   1490 CG  TYR  217 11.189  27.543  63.125 1.000 31.64
ANISOU 1490 CG  TYR  217 3080    2803    6139   338   -1473 -644
ATOM   1491 CD1 TYR  217 10.430  27.928  62.022 1.000 27.85
ANISOU 1491 CD1 TYR  217 2238    3029    5314   511   -175 93
ATOM   1492 CD2 TYR  217 11.512  28.522  64.069 1.000 38.49
ANISOU 1492 CD2 TYR  217 4721    2813    7093   -686  -1682 -749
ATOM   1493 CE1 TYR  217 10.021  29.219  61.772 1.000 26.53
ANISOU 1493 CE1 TYR  217 1908    2675    5496   -41   107  69
ATOM   1494 CE2 TYR  217 11.113  29.835  63.827 1.000 42.90
ANISOU 1494 CE2 TYR  217 7112    2347    6842   -1415 -1949 -218
ATOM   1495 CZ  TYR  217 10.373  30.168  62.712 1.000 34.93
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ANISOU	1495	CZ	TYR	217	4042	2747	6483	-1462	-545	166
ATOM	1496	OH	TYR	217	9.996	31.486	62.473	1.000	36.41	
ANISOU	1496	OH	TYR	217	5499	2895	5439	-753	-250	-289
ATOM	1497	N	ARG	218	14.022	27.110	61.218	1.000	25.58	
ANISOU	1497	N	ARG	218	3461	2406	3852	-227	-533	-476
ATOM	1498	CA	ARG	218	14.923	28.243	61.049	1.000	29.26	
ANISOU	1498	CA	ARG	218	3630	3270	4219	-784	-1349	268
ATOM	1499	C	ARG	218	14.113	29.336	60.366	1.000	24.81	
ANISOU	1499	C	ARG	218	4063	2949	2415	-382	-228	-56
ATOM	1500	O	ARG	218	13.746	29.174	59.212	1.000	29.56	
ANISOU	1500	O	ARG	218	6298	2267	2666	-890	-994	165
ATOM	1501	CB	ARG	218	16.162	27.823	60.256	1.000	35.90	
ANISOU	1501	CB	ARG	218	3223	3685	6732	-624	-703	896
ATOM	1502	CG	ARG	218	17.369	28.665	60.661	1.000	51.38	
ANISOU	1502	CG	ARG	218	4740	6768	8015	-3031	430	-183
ATOM	1503	CD	ARG	218	18.539	28.606	59.701	1.000	38.84	
ANISOU	1503	CD	ARG	218	4968	6308	3482	-3596	-1165	1647
ATOM	1504	NE	ARG	218	19.343	27.395	59.905	1.000	45.09	
ANISOU	1504	NE	ARG	218	4655	7495	4982	-2325	-962	-94
ATOM	1505	CZ	ARG	218	20.272	27.208	58.959	1.000	55.53	
ANISOU	1505	CZ	ARG	218	5299	11458	4340	-2701	-1188	-1948
ATOM	1506	NH1	ARG	218	20.289	28.158	58.031	1.000	60.85	
ANISOU	1506	NH1	ARG	218	2399	16648	4071	-1943	-1333	548
ATOM	1507	NH2	ARG	218	21.060	26.165	59.001	1.000	60.37	
ANISOU	1507	NH2	ARG	218	8580	10111	4247	-2152	639	-4241
ATOM	1508	N	PRO	219	13.871	30.496	60.972	1.000	25.89	
ANISOU	1508	N	PRO	219	2625	4126	3086	35	296	-1014
ATOM	1509	CA	PRO	219	13.065	31.548	60.326	1.000	28.10	
ANISOU	1509	CA	PRO	219	2828	3120	4730	-410	379	-696
ATOM	1510	C	PRO	219	13.636	31.959	58.981	1.000	28.43	
ANISOU	1510	C	PRO	219	3141	3010	4653	-190	116	-328
ATOM	1511	O	PRO	219	12.904	32.393	58.081	1.000	34.17	
ANISOU	1511	O	PRO	219	4734	3500	4750	302	-798	-893
ATOM	1512	CB	PRO	219	13.115	32.717	61.316	1.000	39.70	
ANISOU	1512	CB	PRO	219	5621	3612	5852	-500	1615	-1527
ATOM	1513	CG	PRO	219	13.368	32.033	62.628	1.000	42.38	
ANISOU	1513	CG	PRO	219	6139	5277	4688	-257	2084	-2086
ATOM	1514	CD	PRO	219	14.370	30.943	62.289	1.000	32.77	
ANISOU	1514	CD	PRO	219	3901	5719	2831	-602	828	-1603
ATOM	1515	N	ASP	220	14.950	31.824	58.811	1.000	25.65	
ANISOU	1515	N	ASP	220	3328	1582	4837	-276	801	-878
ATOM	1516	CA	ASP	220	15.590	32.280	57.587	1.000	26.45	
ANISOU	1516	CA	ASP	220	3594	2115	4341	-782	248	-861
ATOM	1517	C	ASP	220	15.781	31.305	56.451	1.000	28.46	
ANISOU	1517	C	ASP	220	3549	1843	5423	-111	1638	-943
ATOM	1518	O	ASP	220	16.432	31.620	55.433	1.000	25.80	
ANISOU	1518	O	ASP	220	3249	2021	4533	-140	623	-412
ATOM	1519	CB	ASP	220	16.911	32.962	57.998	1.000	33.76	
ANISOU	1519	CB	ASP	220	2351	3539	6938	-445	1187	-1724
ATOM	1520	CG	ASP	220	17.882	31.913	58.502	1.000	42.36	
ANISOU	1520	CG	ASP	220	2653	3531	9912	-812	230	-957
ATOM	1521	OD1	ASP	220	17.484	31.170	59.423	1.000	37.00	
ANISOU	1521	OD1	ASP	220	3154	4148	6757	-104	-410	-2001
ATOM	1522	OD2	ASP	220	18.981	31.787	57.957	1.000	37.34	
ANISOU	1522	OD2	ASP	220	2520	4700	6969	93	-824	-1266
ATOM	1523	N	ALA	221	15.292	30.072	56.537	1.000	24.79	
ANISOU	1523	N	ALA	221	4148	1872	3398	-252	671	-659
ATOM	1524	CA	ALA	221	15.695	29.016	55.596	1.000	19.17	
ANISOU	1524	CA	ALA	221	2165	1868	3251	-52	-92	-610
ATOM	1525	C	ALA	221	14.551	27.996	55.479	1.000	18.60	
ANISOU	1525	C	ALA	221	1920	2238	2908	-82	-207	-362

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ATOM   1526 O   ALA  221 13.763  27.852  56.415 1.000 26.47
ANISOU 1526 O   ALA  221 4127    2641    3289   -1307 894  -904
ATOM   1527 CB  ALA  221 16.939  28.316  56.104 1.000 19.36
ANISOU 1527 CB  ALA  221 2054    2333    2969   -537  -316 6  6
ATOM   1528 N   VAL  222 14.490  27.385  54.313 1.000 17.35
ANISOU 1528 N   VAL  222 2089    1841    2661   -101  -323 -154
ATOM   1529 CA  VAL  222 13.556  26.276  54.083 1.000 17.45
ANISOU 1529 CA  VAL  222 1620    2004    3004   -66   -417 1  9
ATOM   1530 C   VAL  222 14.333  24.965  54.077 1.000 15.69
ANISOU 1530 C   VAL  222 1616    1876    2471   -269  -349 -324
ATOM   1531 O   VAL  222 15.512  24.934  53.716 1.000 17.84
ANISOU 1531 O   VAL  222 1658    1730    3390   -108  -194 4  8
ATOM   1532 CB  VAL  222 12.822  26.433  52.747 1.000 19.60
ANISOU 1532 CB  VAL  222 2267    2202    2979   91 -666  -304
ATOM   1533 CG1 VAL  222 13.781  26.363  51.563 1.000 21.96
ANISOU 1533 CG1 VAL  222 2252    3113    2977   250   -645 -182
ATOM   1534 CG2 VAL  222 11.730  25.411  52.490 1.000 22.44
ANISOU 1534 CG2 VAL  222 2923    2537    3067   -497  -898 4  4
ATOM   1535 N   LEU  223 13.789  23.892  54.621 1.000 16.30
ANISOU 1535 N   LEU  223 1792    1694    2706   -239  -93   -532
ATOM   1536 CA  LEU  223 14.407  22.575  54.579 1.000 15.91
ANISOU 1536 CA  LEU  223 1679    1864    2503   -93   -297 -333
ATOM   1537 C   LEU  223 14.114  21.908  53.243 1.000 14.86
ANISOU 1537 C   LEU  223 1337    1537    2773   -141  -322 -458
ATOM   1538 O   LEU  223 12.969  21.888  52.766 1.000 16.23
ANISOU 1538 O   LEU  223 1317    2132    2719   70 -391  -281
ATOM   1539 CB  LEU  223 13.829  21.779  55.761 1.000 19.97
ANISOU 1539 CB  LEU  223 2740    1945    2901   -121  205  -212
ATOM   1540 CG  LEU  223 14.298  20.348  55.882 1.000 23.01
ANISOU 1540 CG  LEU  223 2668    1871    4205   -375  -170 9  1
ATOM   1541 CD1 LEU  223 15.797  20.322  56.143 1.000 23.73
ANISOU 1541 CD1 LEU  223 2570    3067    3378   69 135 3  16
ATOM   1542 CD2 LEU  223 13.492  19.668  56.979 1.000 35.71
ANISOU 1542 CD2 LEU  223 2813    3296    7459   525   1116 2333
ATOM   1543 N   VAL  224 15.115  21.370  52.570 1.000 14.18
ANISOU 1543 N   VAL  224 1383    1446    2560   -28   -320 -205
ATOM   1544 CA  VAL  224 14.956  20.627  51.330 1.000 14.52
ANISOU 1544 CA  VAL  224 1585    1501    2431   -23   -323 -127
ATOM   1545 C   VAL  224 15.320  19.160  51.561 1.000 13.59
ANISOU 1545 C   VAL  224 1464    1522    2178   23 -290  -251
ATOM   1546 O   VAL  224 16.442  18.861  51.981 1.000 15.38
ANISOU 1546 O   VAL  224 1464    1558    2822   0  -505  -374
ATOM   1547 CB  VAL  224 15.832  21.209  50.222 1.000 14.25
ANISOU 1547 CB  VAL  224 1402    1606    2407   -60   -461 -108
ATOM   1548 CG1 VAL  224 15.685  20.443  48.906 1.000 16.63
ANISOU 1548 CG1 VAL  224 1682    2164    2474   -159  -408 -421
ATOM   1549 CG2 VAL  224 15.575  22.687  50.040 1.000 16.40
ANISOU 1549 CG2 VAL  224 1807    1562    2863   6  -509  8  7
ATOM   1550 N   PHE  225 14.340  18.299  51.299 1.000 13.49
ANISOU 1550 N   PHE  225 1494    1526    2106   -66   -353 -130
ATOM   1551 CA  PHE  225 14.647  16.882  51.162 1.000 14.67
ANISOU 1551 CA  PHE  225 1639    1505    2431   -115  -61  -283
ATOM   1552 C   PHE  225 14.756  16.533  49.675 1.000 14.27
ANISOU 1552 C   PHE  225 1536    1533    2352   100   -260 -194
ATOM   1553 O   PHE  225 13.858  16.876  48.893 1.000 16.25
ANISOU 1553 O   PHE  225 1604    2000    2569   296   -311 - 88
ATOM   1554 CB  PHE  225 13.537  15.999  51.749 1.000 15.57
ANISOU 1554 CB  PHE  225 1613    1563    2740   -25   -46  2  4
ATOM   1555 CG  PHE  225 13.387  16.196  53.257 1.000 17.95
ANISOU 1555 CG  PHE  225 1888    2267    2666   -650  -302 203
ATOM   1556 CD1 PHE  225 14.409  15.809  54.157 1.000 27.39
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ANISOU	1556	CD1	PHE	225	2740	4234	3431	-910	-1094 900
ATOM	1557	CD2	PHE	225	12.125	15.863	53.820	1.000	21.09
ANISOU	1557	CD2	PHE	225	2333	2765	2917	-166	399 -527
ATOM	1558	CE1	PHE	225	14.211	15.673	55.521	1.000	26.82
ANISOU	1558	CE1	PHE	225	3108	3657	3424	-1044	-1241 1128
ATOM	1559	CE2	PHE	225	11.910	15.910	55.186	1.000	21.65
ANISOU	1559	CE2	PHE	225	2994	2414	2817	623	239 -39
ATOM	1560	CZ	PHE	225	12.958	15.787	56.078	1.000	28.82
ANISOU	1560	CZ	PHE	225	3705	3716	3531	-832	-663 340
ATOM	1561	N	CYS	226	15.795	15.817	49.266	1.000	12.77
ANISOU	1561	N	CYS	226	1428	1292	2131	-60	-370 -239
ATOM	1562	CA	CYS	226	15.810	15.180	47.956	1.000	12.99
ANISOU	1562	CA	CYS	226	1360	1440	2135	12	-355 -207
ATOM	1563	C	CYS	226	14.903	13.956	47.985	1.000	12.37
ANISOU	1563	C	CYS	226	1533	1212	1955	8	-283 -311
ATOM	1564	O	CYS	226	14.961	13.217	48.974	1.000	15.68
ANISOU	1564	O	CYS	226	1885	1651	2424	-140	-611 158
ATOM	1565	CB	CYS	226	17.228	14.855	47.527	1.000	13.77
ANISOU	1565	CB	CYS	226	1410	1627	2193	19	-203 -75
ATOM	1566	SG	CYS	226	18.224	16.367	47.314	1.000	16.37
ANISOU	1566	SG	CYS	226	1744	1740	2735	-222	-236 -12
ATOM	1567	N	GLY	227	14.150	13.722	46.928	1.000	13.20
ANISOU	1567	N	GLY	227	1388	1513	2113	-28	-293 -290
ATOM	1568	CA	GLY	227	13.352	12.496	46.899	1.000	12.58
ANISOU	1568	CA	GLY	227	1279	1631	1872	-83	-438 -255
ATOM	1569	C	GLY	227	13.903	11.541	45.849	1.000	12.54
ANISOU	1569	C	GLY	227	1518	1279	1965	15	-288 -79
ATOM	1570	O	GLY	227	14.917	11.732	45.152	1.000	13.58
ANISOU	1570	O	GLY	227	1630	1523	2008	51	-155 82
ATOM	1571	N	ALA	228	13.212	10.400	45.712	1.000	13.02
ANISOU	1571	N	ALA	228	1490	1306	2151	59	-204 -161
ATOM	1572	CA	ALA	228	13.663	9.321	44.860	1.000	12.41
ANISOU	1572	CA	ALA	228	1649	1155	1912	-68	-119 -63
ATOM	1573	C	ALA	228	13.706	9.727	43.404	1.000	12.82
ANISOU	1573	C	ALA	228	1566	1288	2016	97	-223 -5
ATOM	1574	O	ALA	228	14.482	9.132	42.651	1.000	13.64
ANISOU	1574	O	ALA	228	1717	1462	2004	26	-6 -131
ATOM	1575	CB	ALA	228	12.714	8.121	45.058	1.000	14.56
ANISOU	1575	CB	ALA	228	1808	1366	2356	-219	358 -243
ATOM	1576	N	ILE	229	12.909	10.695	42.952	1.000	13.61
ANISOU	1576	N	ILE	229	1340	1391	2441	-43	-289 273
ATOM	1577	CA	ILE	229	13.024	11.131	41.566	1.000	12.93
ANISOU	1577	CA	ILE	229	1325	1243	2344	-42	-306 173
ATOM	1578	C	ILE	229	14.342	11.864	41.358	1.000	13.17
ANISOU	1578	C	ILE	229	1327	1364	2311	-47	-191 130
ATOM	1579	O	ILE	229	14.938	11.746	40.262	1.000	14.41
ANISOU	1579	O	ILE	229	1587	1596	2293	-37	-167 183
ATOM	1580	CB	ILE	229	11.768	11.888	41.103	1.000	13.46
ANISOU	1580	CB	ILE	229	1470	1631	2015	171	-354 -42
ATOM	1581	CG1	ILE	229	10.599	10.920	40.973	1.000	15.72
ANISOU	1581	CG1	ILE	229	1218	1936	2817	85	31 118
ATOM	1582	CG2	ILE	229	12.040	12.674	39.808	1.000	14.19
ANISOU	1582	CG2	ILE	229	1670	1425	2298	76	-364 174
ATOM	1583	CD1	ILE	229	10.745	9.924	39.836	1.000	20.03
ANISOU	1583	CD1	ILE	229	2129	1814	3667	-208	-385 -488
ATOM	1584	N	ALA	230	14.877	12.575	42.353	1.000	13.38
ANISOU	1584	N	ALA	230	1252	1378	2454	-97	-176 74
ATOM	1585	CA	ALA	230	16.209	13.185	42.130	1.000	12.30
ANISOU	1585	CA	ALA	230	1156	1444	2074	66	-97 -108
ATOM	1586	C	ALA	230	17.223	12.033	41.976	1.000	12.89
ANISOU	1586	C	ALA	230	1491	1327	2079	128	30 -20

ATOM	1587	O	ALA	230	18.100	12.091	41.146	1.000	13.65			
ANISOU	1587	O	ALA	230	1240	1530	2418	108	4	4	6	
ATOM	1588	CB	ALA	230	16.588	14.000	43.345	1.000	13.66			
ANISOU	1588	CB	ALA	230	1559	1415	2215	-186	-21	-229		
ATOM	1589	N	THR	231	17.143	10.978	42.805	1.000	13.31			
ANISOU	1589	N	THR	231	1526	1318	2214	58	-261	-1		
ATOM	1590	CA	THR	231	18.022	9.815	42.659	1.000	13.32			
ANISOU	1590	CA	THR	231	1660	1307	2093	78	-302	3	2	
ATOM	1591	C	THR	231	17.906	9.224	41.251	1.000	13.27			
ANISOU	1591	C	THR	231	1300	1631	2111	205	-211	3		
ATOM	1592	O	THR	231	18.932	8.974	40.620	1.000	15.51			
ANISOU	1592	O	THR	231	1468	1759	2667	245	58	-170		
ATOM	1593	CB	THR	231	17.656	8.751	43.688	1.000	13.03			
ANISOU	1593	CB	THR	231	1500	1302	2151	46	-166	1	2	
ATOM	1594	OG1	THR	231	17.530	9.313	44.995	1.000	14.70			
ANISOU	1594	OG1	THR	231	1742	1614	2230	-99	32	-14		
ATOM	1595	CG2	THR	231	18.698	7.621	43.697	1.000	13.69			
ANISOU	1595	CG2	THR	231	1449	1419	2335	113	-211	1	9	7
ATOM	1596	N	LEU	232	16.665	9.049	40.796	1.000	13.43			
ANISOU	1596	N	LEU	232	1447	1384	2271	75	-404	-27		
ATOM	1597	CA	LEU	232	16.446	8.396	39.527	1.000	14.11			
ANISOU	1597	CA	LEU	232	1809	1226	2326	80	-468	4	9	
ATOM	1598	C	LEU	232	16.975	9.248	38.381	1.000	15.53			
ANISOU	1598	C	LEU	232	1968	1557	2376	209	-3	9	0	
ATOM	1599	O	LEU	232	17.749	8.808	37.504	1.000	17.16			
ANISOU	1599	O	LEU	232	2024	1949	2546	107	-116	-519		
ATOM	1600	CB	LEU	232	14.940	8.135	39.368	1.000	14.47			
ANISOU	1600	CB	LEU	232	1692	1630	2175	72	-396	-161		
ATOM	1601	CG	LEU	232	14.525	7.307	38.155	1.000	15.89			
ANISOU	1601	CG	LEU	232	1941	1768	2329	120	-470	-303		
ATOM	1602	CD1	LEU	232	15.118	5.920	38.202	1.000	23.19			
ANISOU	1602	CD1	LEU	232	3565	2020	3228	743	-1110	-851		
ATOM	1603	CD2	LEU	232	13.003	7.190	38.126	1.000	19.46			
ANISOU	1603	CD2	LEU	232	2006	2262	3126	-470	-523	-66		
ATOM	1604	N	VAL	233	16.539	10.514	38.299	1.000	13.73			
ANISOU	1604	N	VAL	233	1736	1454	2025	-7	-263	1	9	3
ATOM	1605	CA	VAL	233	16.893	11.317	37.117	1.000	13.84			
ANISOU	1605	CA	VAL	233	1674	1658	1926	141	-73	1	0	7
ATOM	1606	C	VAL	233	18.407	11.510	37.025	1.000	14.08			
ANISOU	1606	C	VAL	233	1716	1674	1958	72	-46	1	1	3
ATOM	1607	O	VAL	233	18.940	11.587	35.910	1.000	16.65			
ANISOU	1607	O	VAL	233	1923	2325	2079	38	109	4	0	1
ATOM	1608	CB	VAL	233	16.098	12.626	37.062	1.000	14.69			
ANISOU	1608	CB	VAL	233	1680	1696	2206	141	-165	3	3	3
ATOM	1609	CG1	VAL	233	16.529	13.650	38.113	1.000	15.70			
ANISOU	1609	CG1	VAL	233	1615	1654	2698	34	156	-28		
ATOM	1610	CG2	VAL	233	16.117	13.206	35.647	1.000	16.43			
ANISOU	1610	CG2	VAL	233	1740	2041	2459	251	117	5	9	6
ATOM	1611	N	THR	234	19.100	11.594	38.175	1.000	14.23			
ANISOU	1611	N	THR	234	1599	1724	2083	146	-110	2	3	5
ATOM	1612	CA	THR	234	20.524	11.908	38.148	1.000	16.14			
ANISOU	1612	CA	THR	234	1664	1868	2602	63	-171	-49		
ATOM	1613	C	THR	234	21.346	10.621	38.006	1.000	17.09			
ANISOU	1613	C	THR	234	1717	1865	2912	146	211	-51		
ATOM	1614	O	THR	234	22.558	10.644	38.139	1.000	17.25			
ANISOU	1614	O	THR	234	1776	1951	2828	108	200	2	2	9
ATOM	1615	CB	THR	234	21.030	12.681	39.373	1.000	15.29			
ANISOU	1615	CB	THR	234	1667	1502	2642	-46	-149	1	6	3
ATOM	1616	OG1	THR	234	20.849	11.819	40.522	1.000	15.45			
ANISOU	1616	OG1	THR	234	1659	1708	2502	-80	59	4	4	
ATOM	1617	CG2	THR	234	20.291	13.978	39.597	1.000	16.61			

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ANISOU 1617 CG2 THR  234 1564    1672    3077   3  -34 -42
ATOM   1618 N   GLY  235 20.712  9.441  37.833 1.000 16.80
ANISOU 1618 N   GLY  235 1905    1914    2564   193   29 -219
ATOM   1619 CA  GLY  235 21.484  8.209  37.792 1.000 17.10
ANISOU 1619 CA  GLY  235 2049    1861    2586   133   223 -488
ATOM   1620 C   GLY  235 22.225  7.931  39.083 1.000 18.06
ANISOU 1620 C   GLY  235 2046    2049    2768   419   499  303
ATOM   1621 O   GLY  235 23.285  7.289  39.010 1.000 21.26
ANISOU 1621 O   GLY  235 2167    2606    3303   679   343  -74
ATOM   1622 N   GLY  236 21.602  8.149  40.237 1.000 16.17
ANISOU 1622 N   GLY  236 1663    1901    2582    36 291 305
ATOM   1623 CA  GLY  236 22.080  7.673  41.520 1.000 17.27
ANISOU 1623 CA  GLY  236 2135    1671    2754   225   28 229
ATOM   1624 C   GLY  236 23.033  8.639  42.194 1.000 16.88
ANISOU 1624 C   GLY  236 1880    1890    2644   204   100  222
ATOM   1625 O   GLY  236 23.692  8.272  43.193 1.000 19.42
ANISOU 1625 O   GLY  236 2165    2399    2814   314   -90  419
ATOM   1626 N   GLN  237 23.134  9.890  41.746 1.000 16.99
ANISOU 1626 N   GLN  237 1647    1851    2957   213  -213 167
ATOM   1627 CA  GLN  237 24.074 10.849  42.298 1.000 16.75
ANISOU 1627 CA  GLN  237 1608    2004    2752    72 177  98
ATOM   1628 C   GLN  237 23.481 11.604  43.483 1.000 15.64
ANISOU 1628 C   GLN  237 1404    2136    2402   231  -146 200
ATOM   1629 O   GLN  237 24.183 12.382  44.164 1.000 18.17
ANISOU 1629 O   GLN  237 1581    2508    2817  -227   -6 -46
ATOM   1630 CB  GLN  237 24.456 11.855  41.217 1.000 17.17
ANISOU 1630 CB  GLN  237 1912    2080    2532    71 141  -7
ATOM   1631 CG  GLN  237 25.304 11.221  40.115 1.000 17.64
ANISOU 1631 CG  GLN  237 1850    2410    2441   226   95 -30
ATOM   1632 CD  GLN  237 25.721 12.302  39.137 1.000 19.72
ANISOU 1632 CD  GLN  237 1680    2833    2979   104   317  307
ATOM   1633 OE1 GLN  237 26.602 13.110  39.436 1.000 24.27
ANISOU 1633 OE1 GLN  237 1841    3145    4234  -213  -187 809
ATOM   1634 NE2 GLN  237 24.986 12.399  38.027 1.000 18.53
ANISOU 1634 NE2 GLN  237 2007    2298    2735   432   374  202
ATOM   1635 N   VAL  238 22.221 11.359  43.807 1.000 14.75
ANISOU 1635 N   VAL  238 1563    1804    2237   -32   -54   4  3
ATOM   1636 CA  VAL  238 21.533 12.075  44.862 1.000 14.41
ANISOU 1636 CA  VAL  238 1535    1553    2388    0  -44  32
ATOM   1637 C   VAL  238 20.861 11.060  45.781 1.000 13.56
ANISOU 1637 C   VAL  238 1414    1392    2346   82  55 -149
ATOM   1638 O   VAL  238 20.136 10.174  45.302 1.000 15.87
ANISOU 1638 O   VAL  238 1655    1639    2737  -218  -285 -22
ATOM   1639 CB  VAL  238 20.467 13.061  44.309 1.000 14.73
ANISOU 1639 CB  VAL  238 1817    1626    2152   35 -437  -95
ATOM   1640 CG1 VAL  238 19.805 13.764  45.489 1.000 15.70
ANISOU 1640 CG1 VAL  238 1965    1490    2510   174  -524 -423
ATOM   1641 CG2 VAL  238 21.064 13.994  43.280 1.000 16.82
ANISOU 1641 CG2 VAL  238 1862    1718    2812   -60  -378 222
ATOM   1642 N   LYS  239 21.119 11.153  47.071 1.000 14.47
ANISOU 1642 N   LYS  239 1704    1474    2318   14  -40  12
ATOM   1643 CA  LYS  239 20.470 10.360  48.104 1.000 14.43
ANISOU 1643 CA  LYS  239 1460    1617    2406   106  -168 179
ATOM   1644 C   LYS  239 19.048 10.852  48.409 1.000 14.82
ANISOU 1644 C   LYS  239 1533    1456    2642   102   -53  232
ATOM   1645 O   LYS  239 18.839 12.067  48.457 1.000 14.74
ANISOU 1645 O   LYS  239 1841    1442    2318   158  -275 190
ATOM   1646 CB  LYS  239 21.320 10.435  49.385 1.000 16.40
ANISOU 1646 CB  LYS  239 1995    1712    2527   243  -543 252
ATOM   1647 CG  LYS  239 20.767 9.549  50.498 1.000 16.65
ANISOU 1647 CG  LYS  239 1954    1759    2614   -58  -781 244
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ATOM   1648 CD  LYS  239 21.738  9.511  51.683 1.000 19.76
ANISOU 1648 CD  LYS  239 2954   1820   2732   -123  -1234  363
ATOM   1649 CE  LYS  239 21.107  8.835  52.896 1.000 22.58
ANISOU 1649 CE  LYS  239 3331   2164   3086   -652  -1502  863
ATOM   1650 NZ  LYS  239 21.904  8.883  54.145 1.000 23.13
ANISOU 1650 NZ  LYS  239 2817   3360   2612   -471  -943 287
ATOM   1651 N   ALA  240 18.140  9.892  48.659 1.000 14.35
ANISOU 1651 N   ALA  240 1429   1607   2418   -156  -334 -61
ATOM   1652 CA  ALA  240 16.791  10.192 49.145 1.000 13.98
ANISOU 1652 CA  ALA  240 1468   1635   2210   -151  -335 -10
ATOM   1653 C   ALA  240 16.728  9.776  50.605 1.000 13.44
ANISOU 1653 C   ALA  240 1439   1388   2279   77 -450  2 2
ATOM   1654 O   ALA  240 16.514  8.592  50.913 1.000 16.32
ANISOU 1654 O   ALA  240 1932   1567   2699   -215  -673 314
ATOM   1655 CB  ALA  240 15.712  9.565  48.268 1.000 15.21
ANISOU 1655 CB  ALA  240 1510   1962   2306   -104  -387 -307
ATOM   1656 N   PRO  241 16.907  10.701 51.546 1.000 14.23
ANISOU 1656 N   PRO  241 1634   1551   2221   -87   -292 7 1
ATOM   1657 CA  PRO  241 17.035  10.251 52.940 1.000 14.68
ANISOU 1657 CA  PRO  241 1718   1681   2180   -350  -174 -30
ATOM   1658 C   PRO  241 15.693  9.961  53.579 1.000 13.89
ANISOU 1658 C   PRO  241 1659   1581   2039   -107  -207 -74
ATOM   1659 O   PRO  241 14.629  10.527 53.261 1.000 17.06
ANISOU 1659 O   PRO  241 1698   1946   2838   17 -254  146
ATOM   1660 CB  PRO  241 17.689  11.462 53.619 1.000 16.63
ANISOU 1660 CB  PRO  241 2162   1657   2501   -460  -487 5 5
ATOM   1661 CG  PRO  241 17.138  12.651 52.826 1.000 16.56
ANISOU 1661 CG  PRO  241 2433   1601   2258   -367  -274 3 1
ATOM   1662 CD  PRO  241 17.164  12.140 51.409 1.000 14.92
ANISOU 1662 CD  PRO  241 1841   1490   2339   -215  -186 -66
ATOM   1663 N   ARG  242 15.740  9.049  54.544 1.000 15.74
ANISOU 1663 N   ARG  242 1914   1853   2212   -381  -308 204
ATOM   1664 CA  ARG  242 14.574  8.772  55.376 1.000 15.50
ANISOU 1664 CA  ARG  242 1955   1863   2073   -236  -291 180
ATOM   1665 C   ARG  242 14.406  9.841  56.437 1.000 16.60
ANISOU 1665 C   ARG  242 1889   2011   2407   -120  -411 -51
ATOM   1666 O   ARG  242 15.372  10.416 56.994 1.000 18.31
ANISOU 1666 O   ARG  242 2041   2186   2732   -216  -559 -180
ATOM   1667 CB  ARG  242 14.728  7.419  56.085 1.000 18.38
ANISOU 1667 CB  ARG  242 2920   1810   2253   -486  -391 269
ATOM   1668 CG  ARG  242 14.564  6.273  55.094 1.000 18.42
ANISOU 1668 CG  ARG  242 2372   1873   2755   -88   162  -155
ATOM   1669 CD  ARG  242 14.854  4.935  55.796 1.000 23.07
ANISOU 1669 CD  ARG  242 3380   2022   3366   470   -483 -217
ATOM   1670 NE  ARG  242 16.334  4.954  55.991 1.000 26.69
ANISOU 1670 NE  ARG  242 3498   2727   3916   444   -829 4 7
ATOM   1671 CZ  ARG  242 16.941  3.921  56.584 1.000 27.19
ANISOU 1671 CZ  ARG  242 3166   2879   4284   -297  -1143  802
ATOM   1672 NH1 ARG  242 16.157  2.913  56.989 1.000 33.14
ANISOU 1672 NH1 ARG  242 3810   3235   5546   -316  528  726
ATOM   1673 NH2 ARG  242 18.241  3.889  56.779 1.000 31.13
ANISOU 1673 NH2 ARG  242 3043   2925   5859   227   -769 484
ATOM   1674 N   HIS  243 13.188  10.057 56.872 1.000 17.55
ANISOU 1674 N   HIS  243 1979   2233   2457   -165  -173 -74
ATOM   1675 CA  HIS  243 12.913  11.050 57.914 1.000 17.84
ANISOU 1675 CA  HIS  243 2186   2139   2452   -260  -123 -75
ATOM   1676 C   HIS  243 11.644  10.627 58.643 1.000 17.52
ANISOU 1676 C   HIS  243 2102   2084   2470   -248  -164 -325
ATOM   1677 O   HIS  243 10.870  9.803  58.132 1.000 20.23
ANISOU 1677 O   HIS  243 2226   2593   2868   -551  -323 -392
ATOM   1678 CB  HIS  243 12.865  12.456 57.324 1.000 19.74
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ANISOU 1678 CB  HIS  243 2770    2248    2482   -188  -106 8  3
ATOM   1679 CG  HIS  243 11.922  12.630  56.187 1.000 22.60
ANISOU 1679 CG  HIS  243 3449    2513    2624   164    -382 0
ATOM   1680 ND1 HIS  243 12.209  12.299  54.879 1.000 25.87
ANISOU 1680 ND1 HIS  243 4780    2575    2473   -609   -403 5  3
ATOM   1681 CD2 HIS  243 10.633  13.034  56.172 1.000 29.11
ANISOU 1681 CD2 HIS  243 3220    4490    3348   121    -421 1630
ATOM   1682 CE1 HIS  243 11.182  12.573  54.109 1.000 32.92
ANISOU 1682 CE1 HIS  243 5835    3672    3001   -1102  -1367  6 8 9
ATOM   1683 NE2 HIS  243 10.214  13.012  54.875 1.000 36.95
ANISOU 1683 NE2 HIS  243 5719    4201    4119   1019   -2016  9 8 7
ATOM   1684 N   HIS  244 11.437  11.194  59.831 1.000 18.87
ANISOU 1684 N   HIS  244 2523    2477    2171   -88    -141  -1 1 7
ATOM   1685 CA  HIS  244 10.302  10.801  60.649 1.000 20.83
ANISOU 1685 CA  HIS  244 2802    2485    2628   171    251  2 7 2
ATOM   1686 C   HIS  244 9.927   11.968  61.551 1.000 20.33
ANISOU 1686 C   HIS  244 1803    2969    2953   -31    -78  -2 7 3
ATOM   1687 O   HIS  244 10.482  13.073  61.510 1.000 21.71
ANISOU 1687 O   HIS  244 2057    3418    2774   -535   145  -8 5 3
ATOM   1688 CB  HIS  244 10.714  9.557   61.468 1.000 24.38
ANISOU 1688 CB  HIS  244 4066    2644    2553   -76    -390 4 4 1
ATOM   1689 CG  HIS  244 11.859  9.725   62.423 1.000 28.34
ANISOU 1689 CG  HIS  244 4158    3498    3113   696    -727  - 8 9
ATOM   1690 ND1 HIS  244 13.132  9.205   62.268 1.000 32.35
ANISOU 1690 ND1 HIS  244 4012    4471    3808   548    -485  - 8 5 0
ATOM   1691 CD2 HIS  244 11.928  10.391  63.609 1.000 25.21
ANISOU 1691 CD2 HIS  244 2937    4137    2505   -373   45 2 1 9
ATOM   1692 CE1 HIS  244 13.887  9.531   63.312 1.000 31.71
ANISOU 1692 CE1 HIS  244 4157    4277    3613   1224   -749  - 5 1 8
ATOM   1693 NE2 HIS  244 13.146  10.263  64.150 1.000 24.52
ANISOU 1693 NE2 HIS  244 3165    3517    2633   94   -82  4 9 2
ATOM   1694 N   VAL  245 8.890   11.687  62.349 1.000 23.87
ANISOU 1694 N   VAL  245 2627    3119    3322   -251   531  - 3 1 0
ATOM   1695 CA  VAL  245 8.473   12.691  63.349 1.000 24.85
ANISOU 1695 CA  VAL  245 2785    3770    2888   481    149  - 2 9 3
ATOM   1696 C   VAL  245 8.624   12.079  64.735 1.000 26.03
ANISOU 1696 C   VAL  245 3220    3558    3112   -289   179  8  9
ATOM   1697 O   VAL  245 8.023   11.025  64.969 1.000 27.98
ANISOU 1697 O   VAL  245 3120    3085    4428   42   295  - 5 9
ATOM   1698 CB  VAL  245 7.020   13.114  63.099 1.000 26.02
ANISOU 1698 CB  VAL  245 2621    3489    3777   94   -103  - 5 6 9
ATOM   1699 CG1 VAL  245 6.586   14.114  64.161 1.000 28.06
ANISOU 1699 CG1 VAL  245 2717    3330    4614   159    746  - 4 8 5
ATOM   1700 CG2 VAL  245 6.927   13.705  61.680 1.000 30.51
ANISOU 1700 CG2 VAL  245 3564    3809    4220   1264   -305  - 3 3
ATOM   1701 N   ALA  246 9.399   12.696  65.603 1.000 28.08
ANISOU 1701 N   ALA  246 4338    3787    2543   -850   250  2 5 4
ATOM   1702 CA  ALA  246 9.567   12.316  67.003 1.000 27.45
ANISOU 1702 CA  ALA  246 4363    3360    2707   292    275  3 7 3
ATOM   1703 C   ALA  246 8.356   12.740  67.833 1.000 32.68
ANISOU 1703 C   ALA  246 4915    4473    3031   98 880 1 9 7
ATOM   1704 O   ALA  246 7.774   13.791  67.563 1.000 29.54
ANISOU 1704 O   ALA  246 3522    4283    3417   -224   875  - 3 2 9
ATOM   1705 CB  ALA  246 10.819  13.010  67.542 1.000 30.33
ANISOU 1705 CB  ALA  246 4564    3949    3011   615    -221  - 4 2 2
ATOM   1706 N   ALA  247 8.048   11.958  68.849 1.000 34.09
ANISOU 1706 N   ALA  247 4483    5156    3311   -1190  466  3 9 3
ATOM   1707 CA  ALA  247 7.036   12.190  69.859 1.000 34.23
ANISOU 1707 CA  ALA  247 4188    5627    3189   -1215  315  5 1 5
ATOM   1708 C   ALA  247 7.609   12.910  71.081 1.000 33.31
ANISOU 1708 C   ALA  247 5419    4684    2555   249    -506  1 1 4 7
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ATOM   1709 O   ALA 247 8.733  12.708 71.523 1.000 38.23
ANISOU 1709 O   ALA 247 5787   4478   4259   -378  -1519 1230
ATOM   1710 CB  ALA 247 6.383  10.881 70.314 1.000 47.11
ANISOU 1710 CB  ALA 247 8374   6726   2801   -2800 1464 686
ATOM   1711 N   PRO 248 6.817  13.851 71.577 1.000 42.28
ANISOU 1711 N   PRO 248 5771   5458   4836   -300  933  -97
ATOM   1712 CA  PRO 248 7.256  14.581 72.773 1.000 44.85
ANISOU 1712 CA  PRO 248 7568   5478   3996   -645  1413 214
ATOM   1713 C   PRO 248 7.161  13.618 73.948 1.000 49.25
ANISOU 1713 C   PRO 248 7978   5660   5075   -1446 552  985
ATOM   1714 O   PRO 248 6.251  12.794 74.014 1.000 45.48
ANISOU 1714 O   PRO 248 7651   5391   4237   -1127 2573 -796
ATOM   1715 CB  PRO 248 6.196  15.674 72.897 1.000 49.75
ANISOU 1715 CB  PRO 248 8563   4816   5523   -513  1238 -138
ATOM   1716 CG  PRO 248 4.973  15.053 72.299 1.000 50.89
ANISOU 1716 CG  PRO 248 7228   5564   6545   -108  2210 -1064
ATOM   1717 CD  PRO 248 5.489  14.272 71.114 1.000 44.69
ANISOU 1717 CD  PRO 248 6395   4579   6006   937   953  -577
ATOM   1718 N   ARG 249 8.109  13.683 74.883 1.000 48.76
ANISOU 1718 N   ARG 249 9141   6341   3045   -1317 1069 -477
ATOM   1719 CA  ARG 249 7.865  12.783 76.024 1.000 55.51
ANISOU 1719 CA  ARG 249 10023  6914   4156   -1098 895  566
ATOM   1720 C   ARG 249 6.844  13.466 76.916 1.000 46.09
ANISOU 1720 C   ARG 249 5561   8382   3568   -2484 -7 1237
ATOM   1721 O   ARG 249 6.244  12.915 77.831 1.000 56.25
ANISOU 1721 O   ARG 249 7572   6368   7433   -377  1799 3995
ATOM   1722 CB  ARG 249 9.177  12.459 76.721 1.000 55.24
ANISOU 1722 CB  ARG 249 8950   7715   4326   705   2864 1270
ATOM   1723 CG  ARG 249 9.915  11.278 76.110 1.000 71.04
ANISOU 1723 CG  ARG 249 12881  7330   6779   1135  3707 622
ATOM   1724 CD  ARG 249 10.403 10.303 77.165 1.000 72.89
ANISOU 1724 CD  ARG 249 11721  7991   7984   2171  2723 409
ATOM   1725 NE  ARG 249 11.124 9.162  76.580 1.000 70.73
ANISOU 1725 NE  ARG 249 8627   9977   8271   2362  2650 -266
ATOM   1726 CZ  ARG 249 12.039 8.493  77.282 1.000 72.71
ANISOU 1726 CZ  ARG 249 10269  9417   7942   2304  2153 133
ATOM   1727 NH1 ARG 249 12.297 8.893  78.521 1.000 89.50
ANISOU 1727 NH1 ARG 249 22286  6161   5559   2015  1622 3874
ATOM   1728 NH2 ARG 249 12.682 7.462  76.761 1.000 67.68
ANISOU 1728 NH2 ARG 249 5358   10062  10295  1004  3886 221
ATOM   1729 N   ALA 254 1.981  18.918 75.430 1.000 85.24
ANISOU 1729 N   ALA 254 15501  7922   8964   -4581 -1437 2347
ATOM   1730 CA  ALA 254 2.287  20.081 76.257 1.000 76.08
ANISOU 1730 CA  ALA 254 12510  8110   8286   -3993 1617 1592
ATOM   1731 C   ALA 254 2.943  21.216 75.489 1.000 60.91
ANISOU 1731 C   ALA 254 8383   5719   9040   -506  2886 1312
ATOM   1732 O   ALA 254 4.174  21.309 75.487 1.000 72.37
ANISOU 1732 O   ALA 254 8056   8109   11332  1602  4553 3381
ATOM   1733 CB  ALA 254 3.264  19.667 77.351 1.000 60.48
ANISOU 1733 CB  ALA 254 12589  7262   3131   -866  4570 -1112
ATOM   1734 N   GLY 255 2.200  22.108 74.846 1.000 54.40
ANISOU 1734 N   GLY 255 8029   5451   7190   594   2922 -940
ATOM   1735 CA  GLY 255 2.880  23.171 74.098 1.000 40.05
ANISOU 1735 CA  GLY 255 5181   4570   5465   1424  836  -921
ATOM   1736 C   GLY 255 3.640  22.565 72.921 1.000 38.82
ANISOU 1736 C   GLY 255 4227   4772   5749   557   702  -1561
ATOM   1737 O   GLY 255 4.580  23.163 72.398 1.000 39.96
ANISOU 1737 O   GLY 255 2978   6491   5715   -128  -136 -2226
ATOM   1738 N   SER 256 3.164  21.387 72.509 1.000 37.29
ANISOU 1738 N   SER 256 5047   4594   4527   389   11  -853
ATOM   1739 CA  SER 256 3.738  20.606 71.429 1.000 35.71
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ANISOU 1739 CA  SER  256 4737  4533   4299   560   -501 -919
ATOM   1740 C   SER  256 2.983  20.742 70.118 1.000 34.93
ANISOU 1740 C   SER  256 4584  4669   4019   -98   -85  91
ATOM   1741 O   SER  256 3.251  20.000 69.162 1.000 33.92
ANISOU 1741 O   SER  256 3575  6107   3207   503   304  377
ATOM   1742 CB  SER  256 3.845  19.136 71.853 1.000 30.17
ANISOU 1742 CB  SER  256 3125  4830   3509   624   212  -492
ATOM   1743 OG  SER  256 2.688  18.752 72.601 1.000 61.15
ANISOU 1743 OG  SER  256 2987  8497   11750  451   1943 2630
ATOM   1744 N   SER  257 2.065  21.700 70.030 1.000 35.54
ANISOU 1744 N   SER  257 4037  5989   3479   347   242  -86
ATOM   1745 CA  SER  257 1.379  21.993 68.767 1.000 30.95
ANISOU 1745 CA  SER  257 2824  5827   3109   170   672  -509
ATOM   1746 C   SER  257 2.378  22.538 67.760 1.000 30.63
ANISOU 1746 C   SER  257 3181  5524   2934   -476  765  -1297
ATOM   1747 O   SER  257 3.359  23.159 68.199 1.000 34.70
ANISOU 1747 O   SER  257 3500  6070   3616   -829  603  -1516
ATOM   1748 CB  SER  257 0.331  23.088 69.036 1.000 38.70
ANISOU 1748 CB  SER  257 3085  6518   5103   796   1381 435
ATOM   1749 OG  SER  257 0.801  24.361 68.601 1.000 65.12
ANISOU 1749 OG  SER  257 8002  5175   11565  -999  -3375 383
ATOM   1750 N   ARG  258 2.119  22.384 66.471 1.000 30.51
ANISOU 1750 N   ARG  258 3668  5068   2855   -332  677  -995
ATOM   1751 CA  ARG  258 2.997  22.819 65.396 1.000 28.15
ANISOU 1751 CA  ARG  258 3100  4620   2976   -106  358  -544
ATOM   1752 C   ARG  258 2.198  22.913 64.096 1.000 25.64
ANISOU 1752 C   ARG  258 3488  3381   2872   -676  273  -904
ATOM   1753 O   ARG  258 1.132  22.294 63.981 1.000 24.93
ANISOU 1753 O   ARG  258 3162  3240   3070   -441  478  -560
ATOM   1754 CB  ARG  258 4.175  21.873 65.154 1.000 27.21
ANISOU 1754 CB  ARG  258 3158  4041   3141   -446  313  -1352
ATOM   1755 CG  ARG  258 3.861  20.508 64.570 1.000 30.90
ANISOU 1755 CG  ARG  258 4782  3429   3531   -737  -738 -389
ATOM   1756 CD  ARG  258 5.039  19.537 64.769 1.000 36.65
ANISOU 1756 CD  ARG  258 5937  3466   4523   106   477  306
ATOM   1757 NE  ARG  258 4.597  18.176 64.411 1.000 32.42
ANISOU 1757 NE  ARG  258 3372  3858   5089   -85   -274 528
ATOM   1758 CZ  ARG  258 4.633  17.777 63.143 1.000 37.32
ANISOU 1758 CZ  ARG  258 5670  2958   5553   155   680  43
ATOM   1759 NH1 ARG  258 5.075  18.622 62.217 1.000 29.98
ANISOU 1759 NH1 ARG  258 3077  3435   4881   -150  -211 -103
ATOM   1760 NH2 ARG  258 4.210  16.566 62.824 1.000 38.66
ANISOU 1760 NH2 ARG  258 5812  3151   5724   -190  -1632 865
ATOM   1761 N   THR  259 2.806  23.572 63.120 1.000 23.62
ANISOU 1761 N   THR  259 2625  3578   2771   -519  315  -1037
ATOM   1762 CA  THR  259 2.337  23.482 61.730 1.000 21.97
ANISOU 1762 CA  THR  259 2614  2934   2800   -36   247  -1041
ATOM   1763 C   THR  259 3.528  23.197 60.808 1.000 19.76
ANISOU 1763 C   THR  259 2257  2663   2587   -38   21  -699
ATOM   1764 O   THR  259 4.698  23.411 61.159 1.000 21.13
ANISOU 1764 O   THR  259 2464  3096   2468   -495  -10  -286
ATOM   1765 CB  THR  259 1.682  24.793 61.278 1.000 24.04
ANISOU 1765 CB  THR  259 2125  3084   3927   70 -157  -1229
ATOM   1766 OG1 THR  259 2.697  25.790 61.041 1.000 23.14
ANISOU 1766 OG1 THR  259 2297  2848   3648   196   -142 -829
ATOM   1767 CG2 THR  259 0.760  25.408 62.331 1.000 25.17
ANISOU 1767 CG2 THR  259 2941  3229   3393   726   264  -136
ATOM   1768 N   SER  260 3.234  22.706 59.600 1.000 20.41
ANISOU 1768 N   SER  260 2386  2762   2609   -61   74  -806
ATOM   1769 CA  SER  260 4.225  22.515 58.551 1.000 19.33
ANISOU 1769 CA  SER  260 2488  2459   2399   192   8  -344
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ATOM   1770 C   SER  260 3.587   22.871  57.210 1.000 18.78
ANISOU 1770 C   SER  260 1996    2544    2595   -379  -264 -311
ATOM   1771 O   SER  260 2.375   22.758  56.988 1.000 21.20
ANISOU 1771 O   SER  260 1917    2448    3689   -75   -269 -573
ATOM   1772 CB  SER  260 4.738   21.076  58.480 1.000 20.28
ANISOU 1772 CB  SER  260 2491    2458    2755   160   -101 -495
ATOM   1773 OG  SER  260 3.656   20.197  58.227 1.000 22.70
ANISOU 1773 OG  SER  260 2758    2574    3294   -113  -284 -169
ATOM   1774 N   SER  261 4.474   23.329  56.330 1.000 18.79
ANISOU 1774 N   SER  261 2189    2215    2737   -55   -92  3 5
ATOM   1775 CA  SER  261 4.148   23.585  54.929 1.000 16.88
ANISOU 1775 CA  SER  261 2074    1718    2622   22 -117  -404
ATOM   1776 C   SER  261 5.066   22.672  54.106 1.000 17.25
ANISOU 1776 C   SER  261 1720    1833    3000   101   -350 -491
ATOM   1777 O   SER  261 6.272   22.876  54.173 1.000 19.96
ANISOU 1777 O   SER  261 1712    2417    3456   50 -483  -781
ATOM   1778 CB  SER  261 4.471   25.028  54.503 1.000 19.95
ANISOU 1778 CB  SER  261 2903    1675    3002   164   -113 -135
ATOM   1779 OG  SER  261 4.404   25.127  53.107 1.000 35.64
ANISOU 1779 OG  SER  261 5435    4814    3293   -1089 -766 1263
ATOM   1780 N   VAL  262 4.467   21.722  53.435 1.000 15.56
ANISOU 1780 N   VAL  262 1751    2021    2140   -75   -40  -436
ATOM   1781 CA  VAL  262 5.247   20.713  52.711 1.000 15.41
ANISOU 1781 CA  VAL  262 1871    1938    2048   43 21 -196
ATOM   1782 C   VAL  262 4.914   20.874  51.242 1.000 14.05
ANISOU 1782 C   VAL  262 1460    1784    2095   -13   29 -144
ATOM   1783 O   VAL  262 3.759   20.712  50.844 1.000 15.45
ANISOU 1783 O   VAL  262 1488    1900    2481   -175  -94  -191
ATOM   1784 CB  VAL  262 4.902   19.307  53.253 1.000 16.87
ANISOU 1784 CB  VAL  262 2144    2005    2260   165   -164 2 3
ATOM   1785 CG1 VAL  262 5.567   18.275  52.364 1.000 20.01
ANISOU 1785 CG1 VAL  262 2433    2006    3165   4  -191  -637
ATOM   1786 CG2 VAL  262 5.335   19.200  54.715 1.000 18.63
ANISOU 1786 CG2 VAL  262 2390    2242    2446   147   -397 175
ATOM   1787 N   PHE  263 5.894   21.163  50.412 1.000 13.73
ANISOU 1787 N   PHE  263 1497    1573    2148   5  -64 186
ATOM   1788 CA  PHE  263 5.762   21.411  48.994 1.000 13.04
ANISOU 1788 CA  PHE  263 1654    1196    2105   -12   -193 113
ATOM   1789 C   PHE  263 6.479   20.253  48.284 1.000 13.56
ANISOU 1789 C   PHE  263 1432    1351    2370   -175  -98  - 87
ATOM   1790 O   PHE  263 7.732   20.177  48.281 1.000 13.83
ANISOU 1790 O   PHE  263 1415    1437    2403   -82   -299 -104
ATOM   1791 CB  PHE  263 6.364   22.770  48.594 1.000 13.50
ANISOU 1791 CB  PHE  263 1658    1374    2098   -295  -97  3 4
ATOM   1792 CG  PHE  263 6.062   23.148  47.135 1.000 13.34
ANISOU 1792 CG  PHE  263 1616    1358    2096   -159  -111 8 2
ATOM   1793 CD1 PHE  263 6.750   22.635  46.051 1.000 14.95
ANISOU 1793 CD1 PHE  263 1977    1547    2156   -354  -131 -384
ATOM   1794 CD2 PHE  263 5.005   24.048  46.883 1.000 15.37
ANISOU 1794 CD2 PHE  263 1549    1557    2735   -139  -264 303
ATOM   1795 CE1 PHE  263 6.468   22.945  44.720 1.000 14.58
ANISOU 1795 CE1 PHE  263 1721    1621    2196   -242  71 -144
ATOM   1796 CE2 PHE  263 4.703   24.366  45.566 1.000 14.71
ANISOU 1796 CE2 PHE  263 1482    1428    2680   -20   -261 137
ATOM   1797 CZ  PHE  263 5.383   23.809  44.479 1.000 16.55
ANISOU 1797 CZ  PHE  263 1935    1492    2862   -152  29 1 4
ATOM   1798 N   PHE  264 5.721   19.405  47.588 1.000 12.07
ANISOU 1798 N   PHE  264 1277    1343    1967   -66   -49  1 9
ATOM   1799 CA  PHE  264 6.267   18.328  46.769 1.000 11.90
ANISOU 1799 CA  PHE  264 1177    1289    2058   -129  34 -21
ATOM   1800 C   PHE  264 6.440   18.775  45.314 1.000 11.76
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ANISOU 1800 C   PHE 264 1206  1258   2004   -121  -42   8
ATOM   1801 O   PHE 264 5.418 19.097 44.683 1.000 12.55
ANISOU 1801 O   PHE 264 1165  1473   2133   -77   -120 4  6
ATOM   1802 CB  PHE 264 5.346 17.099 46.773 1.000 12.39
ANISOU 1802 CB  PHE 264 1101  1498   2110   -304  -42  6  3
ATOM   1803 CG  PHE 264 5.022 16.558 48.150 1.000 13.97
ANISOU 1803 CG  PHE 264 1647  1465   2197   -290  13 1 2 1
ATOM   1804 CD1 PHE 264 5.960 15.848 48.852 1.000 17.07
ANISOU 1804 CD1 PHE 264 2039  1976   2471   -422  -410 4 9 7
ATOM   1805 CD2 PHE 264 3.747 16.679 48.668 1.000 17.41
ANISOU 1805 CD2 PHE 264 1835  2359   2419   -440  433  1 1 2
ATOM   1806 CE1 PHE 264 5.661 15.247 50.053 1.000 20.59
ANISOU 1806 CE1 PHE 264 2616  2710   2496   -556  -425 7 2 5
ATOM   1807 CE2 PHE 264 3.458 16.133 49.906 1.000 22.51
ANISOU 1807 CE2 PHE 264 2151  4047   2355   -787  106  5 5 3
ATOM   1808 CZ  PHE 264 4.386 15.350 50.562 1.000 20.88
ANISOU 1808 CZ  PHE 264 2889  2376   2669   -936  -22  3 0 6
ATOM   1809 N   LEU 265 7.676 18.756 44.811 1.000 11.81
ANISOU 1809 N   LEU 265 1192  1248   2047   -37   47 1 9
ATOM   1810 CA  LEU 265 7.900 19.000 43.374 1.000 12.01
ANISOU 1810 CA  LEU 265 1264  1269   2028   -223  16 - 6 3
ATOM   1811 C   LEU 265 7.915 17.617 42.703 1.000 12.10
ANISOU 1811 C   LEU 265 1266  1298   2033   -117  -81  3
ATOM   1812 O   LEU 265 8.842 16.834 42.915 1.000 12.93
ANISOU 1812 O   LEU 265 1367  1283   2260   -107  -152 4  4
ATOM   1813 CB  LEU 265 9.246 19.730 43.156 1.000 12.59
ANISOU 1813 CB  LEU 265 1399  1364   2019   -257  57 -  9
ATOM   1814 CG  LEU 265 9.500 20.124 41.709 1.000 12.19
ANISOU 1814 CG  LEU 265 1168  1399   2066   -292  -248 3 0 2
ATOM   1815 CD1 LEU 265 8.620 21.314 41.318 1.000 13.29
ANISOU 1815 CD1 LEU 265 1518  1546   1984   84  36 1  9
ATOM   1816 CD2 LEU 265 10.971 20.458 41.449 1.000 13.14
ANISOU 1816 CD2 LEU 265 1204  1593   2197   -234  41 - 2 0
ATOM   1817 N   ARG 266 6.842 17.249 41.996 1.000 12.06
ANISOU 1817 N   ARG 266 1412  1127   2043   -220  -190 4  5
ATOM   1818 CA  ARG 266 6.586 15.913 41.488 1.000 12.07
ANISOU 1818 CA  ARG 266 1372  1201   2012   -258  0  8  0
ATOM   1819 C   ARG 266 6.619 15.965 39.972 1.000 11.75
ANISOU 1819 C   ARG 266 1203  1315   1948   29 -267  1 4 2
ATOM   1820 O   ARG 266 6.032 16.860 39.396 1.000 13.06
ANISOU 1820 O   ARG 266 1430  1318   2214   5  -173  2 8 1
ATOM   1821 CB  ARG 266 5.243 15.370 41.994 1.000 12.95
ANISOU 1821 CB  ARG 266 1142  1477   2302   -189  43 - 3 3
ATOM   1822 CG  ARG 266 5.036 15.606 43.488 1.000 13.80
ANISOU 1822 CG  ARG 266 1351  1686   2207   -159  66 - 1 1 5
ATOM   1823 CD  ARG 266 3.723 15.041 43.993 1.000 12.70
ANISOU 1823 CD  ARG 266 1369  1362   2094   66 -22 8  4
ATOM   1824 NE  ARG 266 2.581 15.648 43.281 1.000 12.97
ANISOU 1824 NE  ARG 266 1343  1155   2428   52 -165  - 1 3 7
ATOM   1825 CZ  ARG 266 1.304 15.281 43.500 1.000 11.34
ANISOU 1825 CZ  ARG 266 1432  1009   1869   45 -149  - 1 0 3
ATOM   1826 NH1 ARG 266 0.995 14.414 44.476 1.000 13.39
ANISOU 1826 NH1 ARG 266 1802  1165   2119   -11  -38  7  2
ATOM   1827 NH2 ARG 266 0.305 15.821 42.826 1.000 12.55
ANISOU 1827 NH2 ARG 266 1490  1067   2210   125  -357 - 1 5 9
ATOM   1828 N   PRO 267 7.237 14.951 39.357 1.000 12.74
ANISOU 1828 N   PRO 267 1418  1394   2030   16 -146  1 0 8
ATOM   1829 CA  PRO 267 7.298 14.947 37.887 1.000 13.88
ANISOU 1829 CA  PRO 267 1442  1786   2047   167  -125 - 8 4
ATOM   1830 C   PRO 267 5.957 14.722 37.222 1.000 12.61
ANISOU 1830 C   PRO 267 1413  1508   1868   -6 44 2  7
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ATOM   1831 O   PRO  267 4.998   14.155  37.772 1.000 13.60
ANISOU 1831 O   PRO  267 1648    1355    2164   -160  118  9  3
ATOM   1832 CB  PRO  267 8.238   13.761  37.599 1.000 15.30
ANISOU 1832 CB  PRO  267 1435    1740    2637   115   -28  -169
ATOM   1833 CG  PRO  267 8.033   12.846  38.764 1.000 15.82
ANISOU 1833 CG  PRO  267 1885    1804    2324   381   -270 -197
ATOM   1834 CD  PRO  267 7.872   13.746  39.965 1.000 14.73
ANISOU 1834 CD  PRO  267 1803    1356    2438   311   -666 -205
ATOM   1835 N   ASN  268 5.933   15.051  35.939 1.000 13.27
ANISOU 1835 N   ASN  268 1601    1665    1777   -126  -43  -127
ATOM   1836 CA  ASN  268 4.800   14.709  35.073 1.000 13.72
ANISOU 1836 CA  ASN  268 1793    1401    2018   -214  -236 -71
ATOM   1837 C   ASN  268 4.723   13.192  34.875 1.000 13.14
ANISOU 1837 C   ASN  268 1485    1350    2156   -213  104  5  4
ATOM   1838 O   ASN  268 5.702   12.467  34.934 1.000 13.90
ANISOU 1838 O   ASN  268 1698    1416    2167   -91   123  -36
ATOM   1839 CB  ASN  268 4.997   15.338  33.690 1.000 15.74
ANISOU 1839 CB  ASN  268 2597    1369    2016   -66   -437 135
ATOM   1840 CG  ASN  268 5.011   16.862  33.811 1.000 15.41
ANISOU 1840 CG  ASN  268 2255    1439    2162   -17   -184 4  7
ATOM   1841 OD1 ASN  268 4.069   17.454  34.352 1.000 17.75
ANISOU 1841 OD1 ASN  268 2573    1686    2487   42  91 - 98
ATOM   1842 ND2 ASN  268 6.066   17.503  33.319 1.000 16.61
ANISOU 1842 ND2 ASN  268 2408    1355    2546   -50   -57  142
ATOM   1843 N   ALA  269 3.531   12.712  34.594 1.000 13.99
ANISOU 1843 N   ALA  269 1677    1467    2172   -356  -65  170
ATOM   1844 CA  ALA  269 3.278   11.286  34.353 1.000 13.42
ANISOU 1844 CA  ALA  269 1459    1405    2234   -208  -118 107
ATOM   1845 C   ALA  269 4.182   10.729  33.252 1.000 13.93
ANISOU 1845 C   ALA  269 1289    1538    2466   -168  -5 153
ATOM   1846 O   ALA  269 4.581   9.550   33.318 1.000 14.97
ANISOU 1846 O   ALA  269 1718    1476    2494   -143  112  8  6
ATOM   1847 CB  ALA  269 1.806   11.051  34.008 1.000 13.76
ANISOU 1847 CB  ALA  269 1300    1474    2454   -60   -61  123
ATOM   1848 N   ASP  270 4.482   11.541  32.251 1.000 14.38
ANISOU 1848 N   ASP  270 1688    1476    2300   -151  30 - 5
ATOM   1849 CA  ASP  270 5.247   11.079  31.098 1.000 14.83
ANISOU 1849 CA  ASP  270 1747    1693    2194   -99   -42  6  8
ATOM   1850 C   ASP  270 6.749   11.287  31.227 1.000 15.68
ANISOU 1850 C   ASP  270 1714    1886    2357   -224  143  8  6
ATOM   1851 O   ASP  270 7.483   11.008  30.255 1.000 17.12
ANISOU 1851 O   ASP  270 1952    2354    2200   -80   139  226
ATOM   1852 CB  ASP  270 4.718   11.681  29.800 1.000 17.67
ANISOU 1852 CB  ASP  270 2461    1966    2288   -75   -319 126
ATOM   1853 CG  ASP  270 4.968   13.168  29.649 1.000 18.22
ANISOU 1853 CG  ASP  270 2284    2024    2613   -88   -80  474
ATOM   1854 OD1 ASP  270 5.386   13.826  30.607 1.000 20.55
ANISOU 1854 OD1 ASP  270 3424    1541    2844   -47   -287 425
ATOM   1855 OD2 ASP  270 4.646   13.698  28.552 1.000 23.06
ANISOU 1855 OD2 ASP  270 3317    2727    2719   -49   -136 812
ATOM   1856 N   PHE  271 7.221   11.668  32.413 1.000 13.93
ANISOU 1856 N   PHE  271 1556    1318    2417   97 31 4  1
ATOM   1857 CA  PHE  271 8.671   11.723  32.644 1.000 14.41
ANISOU 1857 CA  PHE  271 1624    1430    2423   110   29 263
ATOM   1858 C   PHE  271 9.275   10.349  32.325 1.000 13.31
ANISOU 1858 C   PHE  271 1402    1430    2225   -30   28 218
ATOM   1859 O   PHE  271 8.790   9.340   32.870 1.000 14.91
ANISOU 1859 O   PHE  271 1900    1374    2392   -26   240  192
ATOM   1860 CB  PHE  271 8.942   12.146  34.098 1.000 15.57
ANISOU 1860 CB  PHE  271 1700    1721    2495   -66   -36  9
ATOM   1861 CG  PHE  271 10.386  11.791  34.516 1.000 14.56
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ANISOU 1861 CG  PHE 271 1729    1320    2485   -152  34 -124
ATOM   1862 CD1 PHE 271 11.460  12.369  33.814 1.000 17.76
ANISOU 1862 CD1 PHE 271 1714    1581    3452   -235  393  -249
ATOM   1863 CD2 PHE 271 10.698  10.972  35.570 1.000 18.04
ANISOU 1863 CD2 PHE 271 2182    1543    3130   -95   -540 172
ATOM   1864 CE1 PHE 271 12.786  12.092  34.166 1.000 17.54
ANISOU 1864 CE1 PHE 271 1838    1700    3128   -291  114  -50
ATOM   1865 CE2 PHE 271 11.997  10.609  35.899 1.000 18.84
ANISOU 1865 CE2 PHE 271 1935    1646    3578   -392  -396 425
ATOM   1866 CZ  PHE 271 13.039  11.154  35.162 1.000 17.25
ANISOU 1866 CZ  PHE 271 2444    1697    2415   -486  -19  -394
ATOM   1867 N   THR 272 10.278  10.298  31.453 1.000 13.78
ANISOU 1867 N   THR 272 1514    1641    2083   30 19 154
ATOM   1868 CA  THR 272 10.811  9.046   30.938 1.000 13.99
ANISOU 1868 CA  THR 272 1551    1660    2105   -99   83 67
ATOM   1869 C   THR 272 12.246  8.841   31.410 1.000 14.71
ANISOU 1869 C   THR 272 1598    1549    2441   -3 108 357
ATOM   1870 O   THR 272 13.046  9.808   31.424 1.000 16.23
ANISOU 1870 O   THR 272 1646    1742    2780   -246  5  185
ATOM   1871 CB  THR 272 10.751  9.117   29.388 1.000 16.27
ANISOU 1871 CB  THR 272 1856    2205    2119   191   125  8
ATOM   1872 OG1 THR 272 9.341   9.221   29.032 1.000 17.99
ANISOU 1872 OG1 THR 272 1996    2473    2368   64 -190  264
ATOM   1873 CG2 THR 272 11.249  7.856   28.723 1.000 17.94
ANISOU 1873 CG2 THR 272 2423    2167    2227   173   177  -94
ATOM   1874 N   PHE 273 12.567  7.600   31.743 1.000 14.91
ANISOU 1874 N   PHE 273 1644    1521    2499   92 238 218
ATOM   1875 CA  PHE 273 13.894  7.253   32.254 1.000 15.16
ANISOU 1875 CA  PHE 273 1602    1813    2345   296   277  5 5
ATOM   1876 C   PHE 273 14.350  5.899   31.724 1.000 14.69
ANISOU 1876 C   PHE 273 1408    1647    2528   24 479 178
ATOM   1877 O   PHE 273 13.541  5.086   31.262 1.000 15.91
ANISOU 1877 O   PHE 273 1738    1767    2541   -115  450  119
ATOM   1878 CB  PHE 273 13.899  7.301   33.769 1.000 15.77
ANISOU 1878 CB  PHE 273 1758    1921    2314   -344  286  123
ATOM   1879 CG  PHE 273 12.931  6.336   34.424 1.000 14.54
ANISOU 1879 CG  PHE 273 1390    1726    2410   -95   -11  195
ATOM   1880 CD1 PHE 273 11.601  6.743   34.655 1.000 16.64
ANISOU 1880 CD1 PHE 273 1457    2343    2521   -24   308  362
ATOM   1881 CD2 PHE 273 13.295  5.038   34.721 1.000 15.23
ANISOU 1881 CD2 PHE 273 1863    1624    2300   -110  91 136
ATOM   1882 CE1 PHE 273 10.719  5.848   35.259 1.000 16.10
ANISOU 1882 CE1 PHE 273 1593    2158    2365   -162  292  122
ATOM   1883 CE2 PHE 273 12.419  4.148   35.354 1.000 16.01
ANISOU 1883 CE2 PHE 273 1904    1980    2198   -139  285  181
ATOM   1884 CZ  PHE 273 11.109  4.559   35.548 1.000 15.18
ANISOU 1884 CZ  PHE 273 1843    2001    1925   -141  73 -227
ATOM   1885 N   SER 274 15.634  5.612   31.926 1.000 15.31
ANISOU 1885 N   SER 274 1559    1940    2317   361   383  247
ATOM   1886 CA  SER 274 16.221  4.318   31.518 1.000 15.37
ANISOU 1886 CA  SER 274 1476    1723    2642   32 557 156
ATOM   1887 C   SER 274 15.953  3.284   32.588 1.000 14.67
ANISOU 1887 C   SER 274 973 1877    2726   -113  265 302
ATOM   1888 O   SER 274 16.310  3.476   33.770 1.000 15.98
ANISOU 1888 O   SER 274 1668    1677    2728   126   143  193
ATOM   1889 CB  SER 274 17.742  4.556   31.356 1.000 17.41
ANISOU 1889 CB  SER 274 1487    2019    3112   235   945  725
ATOM   1890 OG  SER 274 18.362  3.280   31.334 1.000 18.03
ANISOU 1890 OG  SER 274 1839    1961    3052   293   840  188
ATOM   1891 N   VAL 275 15.395  2.133   32.182 1.000 15.58
ANISOU 1891 N   VAL 275 1646    1857    2417   -182  461  261
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ATOM   1892 CA  VAL  275 15.158  1.033  33.137 1.000 15.65
ANISOU 1892 CA  VAL  275 1681    1800   2466   -180  261  265
ATOM   1893 C   VAL  275 16.454  0.445  33.659 1.000 15.33
ANISOU 1893 C   VAL  275 1805    1881   2139   116   392  -45
ATOM   1894 O   VAL  275 16.623  0.280  34.871 1.000 15.68
ANISOU 1894 O   VAL  275 2037    1655   2267   6  297 196
ATOM   1895 CB  VAL  275 14.227 -0.004  32.483 1.000 16.05
ANISOU 1895 CB  VAL  275 1635    1708   2755   -76   405  2 1
ATOM   1896 CG1 VAL  275 14.080 -1.186  33.426 1.000 17.04
ANISOU 1896 CG1 VAL  275 2045    1688   2740   -211  230  1 5
ATOM   1897 CG2 VAL  275 12.847  0.608  32.203 1.000 18.45
ANISOU 1897 CG2 VAL  275 1650    2432   2928   -57   135  269
ATOM   1898 N   PRO  276 17.437  0.093  32.844 1.000 16.21
ANISOU 1898 N   PRO  276 1927    1700   2532   97 589 3 6
ATOM   1899 CA  PRO  276 18.707 -0.434  33.399 1.000 18.10
ANISOU 1899 CA  PRO  276 1736    2115   3025   147   616  -93
ATOM   1900 C   PRO  276 19.382  0.541  34.321 1.000 17.52
ANISOU 1900 C   PRO  276 1998    1961   2697   97 469 239
ATOM   1901 O   PRO  276 19.963  0.171  35.348 1.000 19.66
ANISOU 1901 O   PRO  276 2015    2409   3047   24 280 468
ATOM   1902 CB  PRO  276 19.590 -0.796  32.214 1.000 20.80
ANISOU 1902 CB  PRO  276 2094    2687   3121   306   771  -249
ATOM   1903 CG  PRO  276 18.852 -0.390  30.999 1.000 21.57
ANISOU 1903 CG  PRO  276 2051    3098   3046   340   802  -288
ATOM   1904 CD  PRO  276 17.446 -0.021  31.368 1.000 18.17
ANISOU 1904 CD  PRO  276 2053    2306   2546   179   832  -318
ATOM   1905 N   LEU  277 19.325  1.845  34.027 1.000 17.09
ANISOU 1905 N   LEU  277 1571    1898   3025   230   511  107
ATOM   1906 CA  LEU  277 19.962  2.802  34.940 1.000 19.34
ANISOU 1906 CA  LEU  277 2035    2141   3171   -219  218  262
ATOM   1907 C   LEU  277 19.214  2.858  36.249 1.000 18.34
ANISOU 1907 C   LEU  277 1963    1958   3049   -33   -3  -38
ATOM   1908 O   LEU  277 19.815  2.957  37.319 1.000 19.29
ANISOU 1908 O   LEU  277 2466    1710   3154   -271  -188  - 2
ATOM   1909 CB  LEU  277 20.094  4.178  34.291 1.000 21.41
ANISOU 1909 CB  LEU  277 2739    2011   3383   14 12 287
ATOM   1910 CG  LEU  277 20.910  5.192  35.111 1.000 26.34
ANISOU 1910 CG  LEU  277 3662    2367   3978   -980  -547 944
ATOM   1911 CD1 LEU  277 22.396  4.839  35.069 1.000 38.04
ANISOU 1911 CD1 LEU  277 3764    3171   7518   -487  -2057  853
ATOM   1912 CD2 LEU  277 20.708  6.607  34.631 1.000 31.98
ANISOU 1912 CD2 LEU  277 4023    2018   6109   -366  508  732
ATOM   1913 N   ALA  278 17.875  2.711  36.202 1.000 17.30
ANISOU 1913 N   ALA  278 2015    1766   2793   74 218 115
ATOM   1914 CA  ALA  278 17.124  2.712  37.464 1.000 16.75
ANISOU 1914 CA  ALA  278 2200    1566   2600   216   146  - 2
ATOM   1915 C   ALA  278 17.575  1.523  38.313 1.000 16.31
ANISOU 1915 C   ALA  278 1849    1553   2794   -337  -196 107
ATOM   1916 O   ALA  278 17.718  1.635  39.523 1.000 17.26
ANISOU 1916 O   ALA  278 1963    1839   2754   -62   -53  205
ATOM   1917 CB  ALA  278 15.642  2.622  37.177 1.000 17.55
ANISOU 1917 CB  ALA  278 2109    1880   2679   295   195  -11
ATOM   1918 N   ARG  279 17.724  0.362  37.696 1.000 17.07
ANISOU 1918 N   ARG  279 2322    1399   2766   -178  26 308
ATOM   1919 CA  ARG  279 18.099 -0.829  38.473 1.000 16.93
ANISOU 1919 CA  ARG  279 2377    1734   2323   15 -241  203
ATOM   1920 C   ARG  279 19.477 -0.587  39.098 1.000 19.87
ANISOU 1920 C   ARG  279 2491    2292   2766   -487  -384 543
ATOM   1921 O   ARG  279 19.687 -0.974  40.234 1.000 33.04
ANISOU 1921 O   ARG  279 3615    4823   4115   -1726 -1700  2603
ATOM   1922 CB  ARG  279 18.164 -2.042  37.517 1.000 20.04
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ANISOU 1922 CB  ARG  279 2042    1609    3964   108   -221 -305
ATOM   1923 CG  ARG  279 16.742  -2.491  37.179 1.000 20.73
ANISOU 1923 CG  ARG  279 2152    2728    2997   -98   -401 -351
ATOM   1924 CD  ARG  279 16.601  -3.422  35.990 1.000 24.81
ANISOU 1924 CD  ARG  279 3213    2982    3231   -1 -507  -609
ATOM   1925 NE  ARG  279 17.575  -4.484  36.195 1.000 27.50
ANISOU 1925 NE  ARG  279 4331    2656    3463   355   -146 -181
ATOM   1926 CZ  ARG  279 17.301  -5.725  36.620 1.000 41.33
ANISOU 1926 CZ  ARG  279 7720    2466    5519   -186  -454 -142
ATOM   1927 NH1 ARG  279 16.024  -6.012  36.866 1.000 40.58
ANISOU 1927 NH1 ARG  279 8821    3012    3585   -1564 507  452
ATOM   1928 NH2 ARG  279 18.200  -6.688  36.807 1.000 53.27
ANISOU 1928 NH2 ARG  279 9516    2227    8496   -127  -4607 -463
ATOM   1929 N   GLU  280 20.390  0.119   38.424 1.000 19.68
ANISOU 1929 N   GLU  280 2172    2276    3028   84 324 136
ATOM   1930 CA  GLU  280 21.748  0.334   38.948 1.000 20.28
ANISOU 1930 CA  GLU  280 2046    2274    3385   25 581 115
ATOM   1931 C   GLU  280 21.705  1.257   40.182 1.000 20.67
ANISOU 1931 C   GLU  280 2334    1968    3552   -281  285  2 0
ATOM   1932 O   GLU  280 22.723  1.079   40.908 1.000 26.81
ANISOU 1932 O   GLU  280 2659    3419    4107   -37   -183 -87
ATOM   1933 CB  GLU  280 22.651  1.029   37.926 1.000 24.69
ANISOU 1933 CB  GLU  280 2778    2558    4044   -351  1022 303
ATOM   1934 CG  GLU  280 22.997  0.342   36.634 1.000 27.13
ANISOU 1934 CG  GLU  280 2605    4888    2816   596   116  623
ATOM   1935 CD  GLU  280 23.815  1.298   35.760 1.000 43.10
ANISOU 1935 CD  GLU  280 4693    7780    3903   -1328 1206 834
ATOM   1936 OE1 GLU  280 24.541  2.171   36.296 1.000 41.36
ANISOU 1936 OE1 GLU  280 2666    6033    7015   27 1099  690
ATOM   1937 OE2 GLU  280 23.727  1.219   34.520 1.000 64.81
ANISOU 1937 OE2 GLU  280 10844   10028   3751   -2356 1104 2134
ATOM   1938 N   CYS  281 20.777  2.156   40.313 1.000 21.61
ANISOU 1938 N   CYS  281 2372    2240    3599   -211  532  -238
ATOM   1939 CA  CYS  281 20.481  3.164   41.337 1.000 24.33
ANISOU 1939 CA  CYS  281 2114    2911    4219   -526  1121 -817
ATOM   1940 C   CYS  281 19.858  2.568   42.585 1.000 27.11
ANISOU 1940 C   CYS  281 2492    3261    4546   -1608 1457 -1343
ATOM   1941 O   CYS  281 19.789  3.161   43.685 1.000 19.19
ANISOU 1941 O   CYS  281 1997    2012    3282   -250  -326 135
ATOM   1942 CB  CYS  281 19.632  4.438   40.795 1.000 22.02
ANISOU 1942 CB  CYS  281 1214    3088    4063   -286  100  -2108
ATOM   1943 SG  CYS  281 20.639  5.092   39.444 1.000 53.41
ANISOU 1943 SG  CYS  281 10822   4742    4730   -3261 1316 4 5
ATOM   1944 N   GLY  282 19.370  1.317   42.565 1.000 18.81
ANISOU 1944 N   GLY  282 1230    2224    3695   3  -149  -206
ATOM   1945 CA  GLY  282 18.675  0.750   43.744 1.000 17.07
ANISOU 1945 CA  GLY  282 1544    1771    3171   31 -552  -168
ATOM   1946 C   GLY  282 17.194  0.496   43.538 1.000 14.91
ANISOU 1946 C   GLY  282 1601    1645    2417   -135  -453 378
ATOM   1947 O   GLY  282 16.480  -0.062  44.380 1.000 16.38
ANISOU 1947 O   GLY  282 1998    1921    2306   -211  -399 360
ATOM   1948 N   PHE  283 16.625  0.919   42.404 1.000 13.44
ANISOU 1948 N   PHE  283 1563    1539    2006   -189  -336 -115
ATOM   1949 CA  PHE  283 15.173  0.829   42.203 1.000 14.52
ANISOU 1949 CA  PHE  283 1677    1410    2428   -187  -670 4 6
ATOM   1950 C   PHE  283 14.810  -0.604  41.809 1.000 13.08
ANISOU 1950 C   PHE  283 1519    1314    2137   -121  -338 174
ATOM   1951 O   PHE  283 15.311  -1.184  40.837 1.000 14.11
ANISOU 1951 O   PHE  283 1366    1418    2578   -142  -78  1 7
ATOM   1952 CB  PHE  283 14.749  1.800   41.078 1.000 13.76
ANISOU 1952 CB  PHE  283 1814    1288    2125   -39   -268 0
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ATOM   1953 CG  PHE  283 14.842  3.269   41.512 1.000 14.75
ANISOU 1953 CG  PHE  283 1985    1363    2255   12 -317  - 3
ATOM   1954 CD1 PHE  283 13.814  3.904   42.142 1.000 21.50
ANISOU 1954 CD1 PHE  283 2318    1759    4091   303  -23  -626
ATOM   1955 CD2 PHE  283 15.994  3.999   41.298 1.000 17.72
ANISOU 1955 CD2 PHE  283 2526    1244    2963   -307 -89  272
ATOM   1956 CE1 PHE  283 13.909  5.177   42.655 1.000 20.78
ANISOU 1956 CE1 PHE  283 2056    1802    4036   92 66 -647
ATOM   1957 CE2 PHE  283 16.115  5.290   41.814 1.000 15.06
ANISOU 1957 CE2 PHE  283 2101    1257    2364   -5 -255  377
ATOM   1958 CZ  PHE  283 15.084  5.891   42.506 1.000 18.04
ANISOU 1958 CZ  PHE  283 1881    1995    2979   192  -432 2 0
ATOM   1959 N   ASP  284 13.883  -1.178  42.579 1.000 13.07
ANISOU 1959 N   ASP  284 1549    1366    2049   -73  -331 1 1 7
ATOM   1960 CA  ASP  284 13.502  -2.584  42.395 1.000 12.80
ANISOU 1960 CA  ASP  284 1481    1460    1924   -231  -207 1 5 7
ATOM   1961 C   ASP  284 12.335  -2.654  41.421 1.000 12.88
ANISOU 1961 C   ASP  284 1493    1508    1891   -19   -180 - 5 5
ATOM   1962 O   ASP  284 11.231  -3.147  41.741 1.000 13.69
ANISOU 1962 O   ASP  284 1407    1351    2442   -93   -281 9 2
ATOM   1963 CB  ASP  284 13.141  -3.203  43.744 1.000 14.10
ANISOU 1963 CB  ASP  284 1966    1534    1858   -40   -11  1 4 5
ATOM   1964 CG  ASP  284 13.165  -4.730  43.717 1.000 14.49
ANISOU 1964 CG  ASP  284 1906    1520    2079   47 -424  2 9 0
ATOM   1965 OD1 ASP  284 13.732  -5.305  42.758 1.000 14.81
ANISOU 1965 OD1 ASP  284 2036    1343    2250   -152  -166 2 3 1
ATOM   1966 OD2 ASP  284 12.652  -5.310  44.696 1.000 15.32
ANISOU 1966 OD2 ASP  284 1979    1557    2286   -79   -109 1 5 3
ATOM   1967 N   VAL  285 12.644  -2.191  40.217 1.000 12.40
ANISOU 1967 N   VAL  285 1582    1260    1870   79 -185  -131
ATOM   1968 CA  VAL  285 11.599  -2.064  39.216 1.000 12.31
ANISOU 1968 CA  VAL  285 1442    1469    1767   -161  -59  - 1
ATOM   1969 C   VAL  285 11.229  -3.419  38.589 1.000 12.09
ANISOU 1969 C   VAL  285 1220    1407    1967   -1 -100  - 7 9
ATOM   1970 O   VAL  285 12.085  -4.311  38.433 1.000 13.68
ANISOU 1970 O   VAL  285 1237    1514    2446   67 56 4 0
ATOM   1971 CB  VAL  285 12.009  -1.066  38.098 1.000 14.68
ANISOU 1971 CB  VAL  285 1943    1621    2014   -163  -50  2 5 9
ATOM   1972 CG1 VAL  285 12.131  0.332   38.672 1.000 17.08
ANISOU 1972 CG1 VAL  285 2429    1402    2658   18 -465  4 2 5
ATOM   1973 CG2 VAL  285 13.309  -1.499  37.433 1.000 15.69
ANISOU 1973 CG2 VAL  285 2131    2180    1649   -316  161  3 0 6
ATOM   1974 N   SER  286 9.952   -3.541  38.241 1.000 12.24
ANISOU 1974 N   SER  286 1263    1440    1946   -12   -148 - 1 1 7
ATOM   1975 CA  SER  286 9.398   -4.669  37.495 1.000 12.84
ANISOU 1975 CA  SER  286 1571    1463    1845   -356  -30  1 4
ATOM   1976 C   SER  286 8.861   -4.118  36.172 1.000 11.99
ANISOU 1976 C   SER  286 1516    1374    1666   -28   60 -198
ATOM   1977 O   SER  286 7.654   -4.110  35.917 1.000 15.68
ANISOU 1977 O   SER  286 1514    2384    2059   2  18 - 2 0
ATOM   1978 CB  SER  286 8.301   -5.327  38.300 1.000 12.54
ANISOU 1978 CB  SER  286 1407    1442    1915   -59   170  - 5 5
ATOM   1979 OG  SER  286 7.415   -4.380  38.890 1.000 13.15
ANISOU 1979 OG  SER  286 1531    1430    2034   105  -73  - 5 9
ATOM   1980 N   LEU  287 9.769   -3.649  35.333 1.000 13.56
ANISOU 1980 N   LEU  287 1574    1521    2058   41 133 1 7 7
ATOM   1981 CA  LEU  287 9.451   -2.932  34.101 1.000 13.48
ANISOU 1981 CA  LEU  287 1812    1418    1891   -84   116  1 7
ATOM   1982 C   LEU  287 10.075  -3.654  32.908 1.000 15.12
ANISOU 1982 C   LEU  287 1945    1714    2086   32 233 - 3 1
ATOM   1983 O   LEU  287 11.277  -3.883  32.927 1.000 17.91
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ANISOU	1983	O	LEU	287	1885	2275	2645	109	300 -275
ATOM	1984	CB	LEU	287	9.954	-1.480	34.118	1.000	14.37
ANISOU	1984	CB	LEU	287	1773	1380	2306	-34	248 107
ATOM	1985	CG	LEU	287	9.362	-0.603	35.231	1.000	14.32
ANISOU	1985	CG	LEU	287	1421	1496	2523	62	52 -158
ATOM	1986	CD1	LEU	287	10.143	0.705	35.413	1.000	14.53
ANISOU	1986	CD1	LEU	287	1672	1444	2403	0	-146 143
ATOM	1987	CD2	LEU	287	7.921	-0.197	34.820	1.000	16.03
ANISOU	1987	CD2	LEU	287	1476	2035	2579	166	-100 - 7
ATOM	1988	N	ASP	288	9.256	-4.060	31.958	1.000	15.09
ANISOU	1988	N	ASP	288	2041	1611	2081	73	175 -216
ATOM	1989	CA	ASP	288	9.764	-4.722	30.757	1.000	16.55
ANISOU	1989	CA	ASP	288	1992	2028	2268	29	335 -314
ATOM	1990	C	ASP	288	10.437	-3.682	29.874	1.000	18.74
ANISOU	1990	C	ASP	288	2484	2597	2040	-231	97 8 1
ATOM	1991	O	ASP	288	9.998	-2.526	29.849	1.000	25.48
ANISOU	1991	O	ASP	288	3382	2433	3865	-322	639 346
ATOM	1992	CB	ASP	288	8.659	-5.490	30.060	1.000	19.23
ANISOU	1992	CB	ASP	288	2431	2414	2460	-209	258 -720
ATOM	1993	CG	ASP	288	9.139	-6.468	29.000	1.000	19.50
ANISOU	1993	CG	ASP	288	2688	2223	2499	-49	393 -552
ATOM	1994	OD1	ASP	288	10.173	-7.145	29.185	1.000	27.03
ANISOU	1994	OD1	ASP	288	3134	3038	4100	624	427 -716
ATOM	1995	OD2	ASP	288	8.458	-6.566	27.955	1.000	31.00
ANISOU	1995	OD2	ASP	288	3596	4859	3325	307	-361 -2100
ATOM	1996	N	GLY	289	11.489	-4.035	29.137	1.000	22.68
ANISOU	1996	N	GLY	289	2960	2893	2765	-531	778 116
ATOM	1997	CA	GLY	289	12.008	-3.083	28.169	1.000	25.60
ANISOU	1997	CA	GLY	289	3678	3562	2486	-1469	558 1 1
ATOM	1998	C	GLY	289	12.988	-2.078	28.725	1.000	21.08
ANISOU	1998	C	GLY	289	2567	2916	2528	-485	353 150
ATOM	1999	O	GLY	289	13.411	-2.097	29.891	1.000	23.72
ANISOU	1999	O	GLY	289	3428	3219	2364	-1104	440 113
ATOM	2000	N	GLU	290	13.402	-1.168	27.818	1.000	18.32
ANISOU	2000	N	GLU	290	2246	2396	2319	-145	616 -115
ATOM	2001	CA	GLU	290	14.538	-0.301	28.074	1.000	17.75
ANISOU	2001	CA	GLU	290	1912	2419	2412	97	770 -367
ATOM	2002	C	GLU	290	14.261	1.058	28.696	1.000	17.90
ANISOU	2002	C	GLU	290	2180	2308	2313	50	711 -297
ATOM	2003	O	GLU	290	15.143	1.619	29.353	1.000	17.58
ANISOU	2003	O	GLU	290	2525	2050	2104	-35	380 165
ATOM	2004	CB	GLU	290	15.341	-0.161	26.785	1.000	23.21
ANISOU	2004	CB	GLU	290	3184	2508	3126	-273	1753 -467
ATOM	2005	CG	GLU	290	15.833	-1.492	26.226	1.000	24.55
ANISOU	2005	CG	GLU	290	3609	2992	2725	348	1232 -743
ATOM	2006	CD	GLU	290	16.676	-2.280	27.221	1.000	30.03
ANISOU	2006	CD	GLU	290	3365	3708	4337	476	753 -211
ATOM	2007	OE1	GLU	290	17.492	-1.684	27.947	1.000	40.04
ANISOU	2007	OE1	GLU	290	5043	6674	3498	525	36 -1226
ATOM	2008	OE2	GLU	290	16.622	-3.527	27.237	1.000	51.76
ANISOU	2008	OE2	GLU	290	8785	3812	7070	-12	-483 1583
ATOM	2009	N	THR	291	13.064	1.578	28.486	1.000	18.14
ANISOU	2009	N	THR	291	2305	2486	2103	224	711 -321
ATOM	2010	CA	THR	291	12.697	2.896	29.049	1.000	18.72
ANISOU	2010	CA	THR	291	2521	2080	2511	105	1131 6 6
ATOM	2011	C	THR	291	11.278	2.744	29.593	1.000	15.79
ANISOU	2011	C	THR	291	2178	1758	2064	134	538 -50
ATOM	2012	O	THR	291	10.517	1.834	29.217	1.000	18.62
ANISOU	2012	O	THR	291	2764	1966	2344	-248	664 -311
ATOM	2013	CB	THR	291	12.722	4.031	28.044	1.000	21.54
ANISOU	2013	CB	THR	291	3043	2625	2516	-164	891 362

ATOM	2014	OG1	THR	291	11.695	3.862	27.077	1.000	25.98			
ANISOU	2014	OG1	THR	291	3160	4072	2641	-86	703	503		
ATOM	2015	CG2	THR	291	14.048	4.115	27.292	1.000	24.20			
ANISOU	2015	CG2	THR	291	3199	3832	2164	-445	930	533		
ATOM	2016	N	ALA	292	10.959	3.658	30.492	1.000	14.84			
ANISOU	2016	N	ALA	292	1637	1656	2347	200	429	-153		
ATOM	2017	CA	ALA	292	9.675	3.657	31.179	1.000	13.84			
ANISOU	2017	CA	ALA	292	1488	1477	2294	170	299	78		
ATOM	2018	C	ALA	292	9.356	5.065	31.619	1.000	12.65			
ANISOU	2018	C	ALA	292	1334	1564	1908	60	144	-139		
ATOM	2019	O	ALA	292	10.228	5.939	31.710	1.000	14.27			
ANISOU	2019	O	ALA	292	1529	1596	2295	-35	109	116		
ATOM	2020	CB	ALA	292	9.670	2.754	32.414	1.000	14.02			
ANISOU	2020	CB	ALA	292	1693	1580	2053	37	22	-27		
ATOM	2021	N	THR	293	8.054	5.258	31.916	1.000	13.54			
ANISOU	2021	N	THR	293	1468	1617	2058	117	373	-118		
ATOM	2022	CA	THR	293	7.605	6.546	32.424	1.000	13.40			
ANISOU	2022	CA	THR	293	1565	1647	1877	152	209	-232		
ATOM	2023	C	THR	293	7.407	6.482	33.952	1.000	12.09			
ANISOU	2023	C	THR	293	1345	1322	1927	-62	326	-12		
ATOM	2024	O	THR	293	7.214	5.441	34.555	1.000	12.93			
ANISOU	2024	O	THR	293	1385	1356	2170	-190	194	90		
ATOM	2025	CB	THR	293	6.295	7.058	31.788	1.000	13.45			
ANISOU	2025	CB	THR	293	1598	1579	1935	95	345	345		
ATOM	2026	OG1	THR	293	5.273	6.112	32.117	1.000	13.75			
ANISOU	2026	OG1	THR	293	1672	1570	1981	-12	314	135		
ATOM	2027	CG2	THR	293	6.476	7.139	30.272	1.000	15.93			
ANISOU	2027	CG2	THR	293	2121	2022	1911	255	434	337		
ATOM	2028	N	PHE	294	7.241	7.661	34.544	1.000	12.81			
ANISOU	2028	N	PHE	294	1607	1440	1822	-83	149	-151		
ATOM	2029	CA	PHE	294	6.857	7.773	35.935	1.000	12.37			
ANISOU	2029	CA	PHE	294	1332	1469	1899	-267	166	-289		
ATOM	2030	C	PHE	294	5.556	7.022	36.184	1.000	12.36			
ANISOU	2030	C	PHE	294	1336	1361	1999	-151	30	-36		
ATOM	2031	O	PHE	294	5.403	6.253	37.143	1.000	13.27			
ANISOU	2031	O	PHE	294	1556	1410	2076	-191	183	46		
ATOM	2032	CB	PHE	294	6.698	9.271	36.267	1.000	13.83			
ANISOU	2032	CB	PHE	294	2039	1351	1866	-192	-29	-177		
ATOM	2033	CG	PHE	294	6.306	9.488	37.711	1.000	13.10			
ANISOU	2033	CG	PHE	294	1786	1216	1974	-125	-63	-244		
ATOM	2034	CD1	PHE	294	7.207	9.411	38.749	1.000	17.41			
ANISOU	2034	CD1	PHE	294	2132	2533	1952	-1012	-287	76		
ATOM	2035	CD2	PHE	294	4.964	9.739	38.026	1.000	18.41			
ANISOU	2035	CD2	PHE	294	2156	2263	2575	565	332	57		
ATOM	2036	CE1	PHE	294	6.810	9.608	40.054	1.000	17.72			
ANISOU	2036	CE1	PHE	294	2348	2296	2086	-308	-362	-136		
ATOM	2037	CE2	PHE	294	4.591	10.010	39.324	1.000	19.37			
ANISOU	2037	CE2	PHE	294	2078	2541	2740	330	232	-630		
ATOM	2038	CZ	PHE	294	5.507	9.956	40.355	1.000	18.36			
ANISOU	2038	CZ	PHE	294	2443	1678	2855	-394	-55	-245		
ATOM	2039	N	GLN	295	4.588	7.205	35.246	1.000	12.59			
ANISOU	2039	N	GLN	295	1248	1429	2106	-62	38	-168		
ATOM	2040	CA	GLN	295	3.320	6.484	35.408	1.000	12.76			
ANISOU	2040	CA	GLN	295	1266	1215	2365	7	-157	-117		
ATOM	2041	C	GLN	295	3.512	4.984	35.318	1.000	12.24			
ANISOU	2041	C	GLN	295	1449	1256	1944	101	-73			
ATOM	2042	O	GLN	295	2.922	4.238	36.101	1.000	13.61			
ANISOU	2042	O	GLN	295	1323	1427	2424	7	85	155		
ATOM	2043	CB	GLN	295	2.375	6.975	34.317	1.000	14.31			
ANISOU	2043	CB	GLN	295	1227	1594	2616	81	-133	192		
ATOM	2044	CG	GLN	295	1.062	6.256	34.249	1.000	14.03			

ANISOU	2044	CG	GLN	295	1391	1509	2430	-59	-300	4 7
ATOM	2045	CD	GLN	295	0.157	6.687	33.115	1.000	13.56	
ANISOU	2045	CD	GLN	295	1305	1486	2361	133	-117	1 6 5
ATOM	2046	OE1	GLN	295	0.459	7.693	32.419	1.000	15.35	
ANISOU	2046	OE1	GLN	295	1811	1651	2371	161	206	2 2 0
ATOM	2047	NE2	GLN	295	-0.982	6.026	32.943	1.000	15.04	
ANISOU	2047	NE2	GLN	295	1225	1995	2493	75	-139	-9 9
ATOM	2048	N	ASP	296	4.363	4.463	34.423	1.000	12.66	
ANISOU	2048	N	ASP	296	1425	1396	1990	181	-112	-1 1 0
ATOM	2049	CA	ASP	296	4.653	3.016	34.439	1.000	12.26	
ANISOU	2049	CA	ASP	296	1628	1274	1755	53	-51	-1 5 1
ATOM	2050	C	ASP	296	5.167	2.569	35.792	1.000	11.57	
ANISOU	2050	C	ASP	296	1199	1300	1895	-82	30	-2 2
ATOM	2051	O	ASP	296	4.854	1.460	36.224	1.000	13.08	
ANISOU	2051	O	ASP	296	1534	1368	2070	-107	38	1 3 9
ATOM	2052	CB	ASP	296	5.709	2.634	33.399	1.000	14.18	
ANISOU	2052	CB	ASP	296	1870	1700	1819	141	30	-3 7 8
ATOM	2053	CG	ASP	296	5.295	2.848	31.952	1.000	13.32	
ANISOU	2053	CG	ASP	296	1655	1557	1848	-58	67	2
ATOM	2054	OD1	ASP	296	4.110	2.725	31.601	1.000	15.83	
ANISOU	2054	OD1	ASP	296	1680	1935	2402	-68	-126	-1 8 9
ATOM	2055	OD2	ASP	296	6.212	3.098	31.114	1.000	15.27	
ANISOU	2055	OD2	ASP	296	1757	1937	2106	-229	137	1 7 7
ATOM	2056	N	TRP	297	6.038	3.352	36.416	1.000	12.26	
ANISOU	2056	N	TRP	297	1325	1403	1931	-34	-123	-1 1 8
ATOM	2057	CA	TRP	297	6.683	2.960	37.656	1.000	12.82	
ANISOU	2057	CA	TRP	297	1328	1599	1943	-104	-49	1 5 1
ATOM	2058	C	TRP	297	5.746	3.007	38.858	1.000	13.13	
ANISOU	2058	C	TRP	297	1418	1580	1992	24	-23	1 8 5
ATOM	2059	O	TRP	297	5.565	2.030	39.584	1.000	14.03	
ANISOU	2059	O	TRP	297	1554	1619	2159	102	137	3 2 0
ATOM	2060	CB	TRP	297	7.908	3.847	37.928	1.000	13.68	
ANISOU	2060	CB	TRP	297	1130	1692	2376	-19	-169	1 5 1
ATOM	2061	CG	TRP	297	8.646	3.455	39.166	1.000	13.28	
ANISOU	2061	CG	TRP	297	1143	1646	2255	91	-96	2 2
ATOM	2062	CD1	TRP	297	8.932	2.179	39.622	1.000	15.58	
ANISOU	2062	CD1	TRP	297	1615	1689	2618	275	-544	-7 7
ATOM	2063	CD2	TRP	297	9.144	4.353	40.189	1.000	14.69	
ANISOU	2063	CD2	TRP	297	1327	1693	2562	-117	-219	5
ATOM	2064	NE1	TRP	297	9.583	2.265	40.840	1.000	15.34	
ANISOU	2064	NE1	TRP	297	1378	1853	2598	70	-494	7 5
ATOM	2065	CE2	TRP	297	9.724	3.597	41.203	1.000	16.13	
ANISOU	2065	CE2	TRP	297	1241	2009	2880	182	-676	-1 9 6
ATOM	2066	CE3	TRP	297	9.094	5.756	40.284	1.000	22.13	
ANISOU	2066	CE3	TRP	297	3040	1658	3712	-665	-1408	1 2 9
ATOM	2067	CZ2	TRP	297	10.318	4.180	42.316	1.000	18.45	
ANISOU	2067	CZ2	TRP	297	2204	2387	2418	44	-326	-3 3 1
ATOM	2068	CZ3	TRP	297	9.670	6.353	41.399	1.000	21.55	
ANISOU	2068	CZ3	TRP	297	2916	2104	3167	-55	-752	-4 5 8
ATOM	2069	CH2	TRP	297	10.258	5.546	42.397	1.000	23.53	
ANISOU	2069	CH2	TRP	297	3298	2356	3285	-320	-1146	-3 4 4
ATOM	2070	N	ILE	298	5.106	4.167	39.044	1.000	13.58	
ANISOU	2070	N	ILE	298	1324	1726	2108	241	-167	1 2 7
ATOM	2071	CA	ILE	298	4.299	4.440	40.229	1.000	14.68	
ANISOU	2071	CA	ILE	298	1413	2177	1986	-13	-161	-2 0 8
ATOM	2072	C	ILE	298	2.841	4.054	40.121	1.000	12.02	
ANISOU	2072	C	ILE	298	1455	1300	1813	56	-239	4 0 2
ATOM	2073	O	ILE	298	2.182	3.782	41.147	1.000	13.67	
ANISOU	2073	O	ILE	298	1732	1582	1881	-23	-4	1 9 3
ATOM	2074	CB	ILE	298	4.428	5.914	40.673	1.000	19.45	
ANISOU	2074	CB	ILE	298	2261	2446	2683	-699	237	-8 3 5

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ATOM   2075 CG1 ILE  298 5.907   6.245   41.001 1.000 27.83
ANISOU 2075 CG1 ILE  298 2776    4275    3525   -1314 -556 -1030
ATOM   2076 CG2 ILE  298 3.679   6.319   41.929 1.000 25.05
ANISOU 2076 CG2 ILE  298 3770    3344    2405   -57   255  -983
ATOM   2077 CD1 ILE  298 6.368   5.628   42.306 1.000 43.32
ANISOU 2077 CD1 ILE  298 4561    7224    4674   -652  -1890 -117
ATOM   2078 N   GLY  299 2.317   3.980   38.893 1.000 12.16
ANISOU 2078 N   GLY  299 1432    1308    1879   78 -304  106
ATOM   2079 CA  GLY  299 0.918   3.741   38.670 1.000 12.98
ANISOU 2079 CA  GLY  299 1276    1279    2379   106   -188 -154
ATOM   2080 C   GLY  299 0.135   5.017   38.378 1.000 13.09
ANISOU 2080 C   GLY  299 1421    1403    2151   113   -231 118
ATOM   2081 O   GLY  299 0.738   6.025   38.017 1.000 14.00
ANISOU 2081 O   GLY  299 1713    1353    2252   122   289  -13
ATOM   2082 N   GLY  300 -1.183  4.917   38.447 1.000 13.08
ANISOU 2082 N   GLY  300 1325    1545    2099   146   -267 -145
ATOM   2083 CA  GLY  300 -2.075  5.966   37.992 1.000 13.45
ANISOU 2083 CA  GLY  300 1447    1521    2143   116   -415 -143
ATOM   2084 C   GLY  300 -2.519  6.972   39.042 1.000 12.94
ANISOU 2084 C   GLY  300 1098    1365    2456   -52   -407 -192
ATOM   2085 O   GLY  300 -3.262  7.875   38.672 1.000 13.39
ANISOU 2085 O   GLY  300 1321    1342    2423   -19   -217 -45
ATOM   2086 N   ASN  301 -1.973  6.845   40.254 1.000 13.35
ANISOU 2086 N   ASN  301 1494    1429    2151   -225  -232 -104
ATOM   2087 CA  ASN  301 -2.162  7.842   41.313 1.000 13.83
ANISOU 2087 CA  ASN  301 1590    1435    2230   -194  -38  -61
ATOM   2088 C   ASN  301 -0.837  8.254   41.885 1.000 12.46
ANISOU 2088 C   ASN  301 1676    1268    1791   -35   -142 -20
ATOM   2089 O   ASN  301 -0.007  7.405   42.169 1.000 13.89
ANISOU 2089 O   ASN  301 1831    1355    2093   73 -144  -13
ATOM   2090 CB  ASN  301 -3.075  7.238   42.360 1.000 16.01
ANISOU 2090 CB  ASN  301 1632    1909    2542   77 224 315
ATOM   2091 CG  ASN  301 -3.942  8.199   43.106 1.000 18.23
ANISOU 2091 CG  ASN  301 1986    2508    2435   190   152  -90
ATOM   2092 OD1 ASN  301 -4.973  8.690   42.614 1.000 17.44
ANISOU 2092 OD1 ASN  301 1606    1626    3394   -21   144  -190
ATOM   2093 ND2 ASN  301 -3.518  8.454   44.338 1.000 33.30
ANISOU 2093 ND2 ASN  301 2804    6923    2928   1012  -230 -1523
ATOM   2094 N   TYR  302 -0.595  9.564   42.073 1.000 12.96
ANISOU 2094 N   TYR  302 1662    1278    1985   -69   -21  -135
ATOM   2095 CA  TYR  302 0.674   9.948   42.702 1.000 13.48
ANISOU 2095 CA  TYR  302 1673    1259    2192   -130  -132 3 4
ATOM   2096 C   TYR  302 0.768   9.269   44.078 1.000 12.63
ANISOU 2096 C   TYR  302 1413    1293    2092   53 44 1 9
ATOM   2097 O   TYR  302 -0.218  9.151   44.806 1.000 14.15
ANISOU 2097 O   TYR  302 1332    1737    2305   -65   48 -27
ATOM   2098 CB  TYR  302 0.764   11.472  42.916 1.000 13.30
ANISOU 2098 CB  TYR  302 1635    1192    2226   -81   33 4 1
ATOM   2099 CG  TYR  302 1.159   12.143  41.619 1.000 12.02
ANISOU 2099 CG  TYR  302 1586    1103    1880   -59   -25  -271
ATOM   2100 CD1 TYR  302 2.501   12.233  41.275 1.000 13.11
ANISOU 2100 CD1 TYR  302 1633    1284    2066   -80   11 -18
ATOM   2101 CD2 TYR  302 0.235   12.709  40.739 1.000 12.52
ANISOU 2101 CD2 TYR  302 1576    1132    2049   -44   13 -127
ATOM   2102 CE1 TYR  302 2.933   12.822  40.119 1.000 12.29
ANISOU 2102 CE1 TYR  302 1581    1043    2045   -185  -84  -77
ATOM   2103 CE2 TYR  302 0.637   13.273  39.535 1.000 14.12
ANISOU 2103 CE2 TYR  302 1462    1443    2458   -241  15 325
ATOM   2104 CZ  TYR  302 1.983   13.347  39.241 1.000 12.69
ANISOU 2104 CZ  TYR  302 1483    1224    2113   -287  -91  1 0
ATOM   2105 OH  TYR  302 2.376   13.866  38.013 1.000 13.42
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ANISOU 2105 OH  TYR 302 1505  1469  2124   -93   33 1 4 6
ATOM   2106 N   VAL 303 1.956  8.855  44.450 1.000 13.92
ANISOU 2106 N   VAL 303 1406  1637  2246   153   88 9 9
ATOM   2107 CA  VAL 303 2.355  8.336  45.746 1.000 14.51
ANISOU 2107 CA  VAL 303 1838  1320  2355   -137  -391 - 7 4
ATOM   2108 C   VAL 303 3.498  9.244  46.239 1.000 15.23
ANISOU 2108 C   VAL 303 1404  1507  2876   -102  -105 - 3 4 8
ATOM   2109 O   VAL 303 4.471  9.386  45.512 1.000 18.70
ANISOU 2109 O   VAL 303 1859  1861  3386   -239  326  - 5 0 4
ATOM   2110 CB  VAL 303 2.856  6.880  45.632 1.000 16.75
ANISOU 2110 CB  VAL 303 2140  1319  2905   16 -759  - 1 2 3
ATOM   2111 CG1 VAL 303 3.279  6.401  47.017 1.000 19.53
ANISOU 2111 CG1 VAL 303 2185  1951  3284   232   -1054  1 4 8
ATOM   2112 CG2 VAL 303 1.723  5.956  45.125 1.000 17.82
ANISOU 2112 CG2 VAL 303 2476  1442  2852   -213  -558 - 4 0 6
ATOM   2113 N   ASN 304 3.349  9.900  47.378 1.000 14.07
ANISOU 2113 N   ASN 304 1409  1369  2566   -39   -407 - 8 6
ATOM   2114 CA  ASN 304 4.317  10.928 47.772 1.000 14.31
ANISOU 2114 CA  ASN 304 1474  1387  2578   -102  -424 - 5 5
ATOM   2115 C   ASN 304 5.450  10.397 48.637 1.000 13.75
ANISOU 2115 C   ASN 304 1360  1487  2378   34 -274  - 8 7
ATOM   2116 O   ASN 304 6.539  10.962 48.584 1.000 14.60
ANISOU 2116 O   ASN 304 1314  1795  2438   -34   -55  - 3 2 0
ATOM   2117 CB  ASN 304 3.589  12.035 48.551 1.000 14.26
ANISOU 2117 CB  ASN 304 1710  1214  2494   6  -303  1 7 6
ATOM   2118 CG  ASN 304 2.535  12.661 47.642 1.000 14.81
ANISOU 2118 CG  ASN 304 1551  1627  2449   23 -114  4 0 2
ATOM   2119 OD1 ASN 304 2.866  13.255 46.622 1.000 16.52
ANISOU 2119 OD1 ASN 304 1896  1746  2636   80 19 5 8 9
ATOM   2120 ND2 ASN 304 1.290  12.595 48.102 1.000 18.43
ANISOU 2120 ND2 ASN 304 1560  2980  2463   127   -10  1 9 9
ATOM   2121 N   ILE 305 5.175  9.413  49.463 1.000 16.36
ANISOU 2121 N   ILE 305 1546  1553  3117   -78   -503 2 6 6
ATOM   2122 CA  ILE 305 6.173  8.890  50.407 1.000 14.85
ANISOU 2122 CA  ILE 305 1670  1537  2436   165   -277 - 4 0
ATOM   2123 C   ILE 305 6.183  7.372  50.352 1.000 15.78
ANISOU 2123 C   ILE 305 1527  1555  2914   95  -438  - 5 1
ATOM   2124 O   ILE 305 5.231  6.736  49.886 1.000 17.54
ANISOU 2124 O   ILE 305 1463  1789  3412   -131  -404 5
ATOM   2125 CB  ILE 305 5.949  9.430  51.818 1.000 17.80
ANISOU 2125 CB  ILE 305 2167  1962  2634   -23   265  - 2 0 9
ATOM   2126 CG1 ILE 305 4.578  9.091  52.416 1.000 18.93
ANISOU 2126 CG1 ILE 305 1716  2948  2526   1  -218  - 1 6 3
ATOM   2127 CG2 ILE 305 6.171  10.944 51.823 1.000 19.17
ANISOU 2127 CG2 ILE 305 2685  1863  2737   70 -534  - 4 0 5
ATOM   2128 CD1 ILE 305 4.415  9.459  53.863 1.000 21.28
ANISOU 2128 CD1 ILE 305 2521  2902  2662   19 452 - 7 1
ATOM   2129 N   ARG 306 7.246  6.806  50.908 1.000 14.59
ANISOU 2129 N   ARG 306 1738  1641  2165   52 -356  2 7 1
ATOM   2130 CA  ARG 306 7.424  5.360  50.828 1.000 15.25
ANISOU 2130 CA  ARG 306 1509  1663  2622   139   -302 7 7
ATOM   2131 C   ARG 306 8.234  4.903  52.024 1.000 15.02
ANISOU 2131 C   ARG 306 1588  1464  2656   133   -332 - 2 1
ATOM   2132 O   ARG 306 9.141  5.614  52.433 1.000 16.63
ANISOU 2132 O   ARG 306 1682  2101  2536   -219  -294 - 1 6 8
ATOM   2133 CB  ARG 306 8.135  4.943  49.532 1.000 16.31
ANISOU 2133 CB  ARG 306 1820  1681  2697   -100  -270 - 1 5 0
ATOM   2134 CG  ARG 306 8.226  3.414  49.377 1.000 18.43
ANISOU 2134 CG  ARG 306 2476  1700  2828   40 -194  - 1 5 6
ATOM   2135 CD  ARG 306 8.401  3.068  47.900 1.000 18.26
ANISOU 2135 CD  ARG 306 2087  1971  2880   -120  -145 - 3 3 0
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ATOM   2136 NE  ARG  306 7.136   3.228   47.188 1.000 20.53
ANISOU 2136 NE  ARG  306 2442    2013    3345   -577  -663 -234
ATOM   2137 CZ  ARG  306 6.980   3.178   45.873 1.000 20.27
ANISOU 2137 CZ  ARG  306 2330    2057    3316   373   -522 2  0
ATOM   2138 NH1 ARG  306 8.086   3.000   45.107 1.000 22.13
ANISOU 2138 NH1 ARG  306 2136    2580    3695   274   -589 -723
ATOM   2139 NH2 ARG  306 5.759   3.250   45.341 1.000 18.44
ANISOU 2139 NH2 ARG  306 2107    1838    3062   259   -286 8  4
ATOM   2140 N   ARG  307 7.898   3.775   52.612 1.000 19.10
ANISOU 2140 N   ARG  307 2716    1872    2671   -294  -607 3 2 7
ATOM   2141 CA  ARG  307 8.576   3.212   53.768 1.000 21.13
ANISOU 2141 CA  ARG  307 3321    2201    2504   -48   -845 1 3 9
ATOM   2142 C   ARG  307 9.536   2.138   53.277 1.000 23.30
ANISOU 2142 C   ARG  307 3417    2170    3267   181   -1046 3  9
ATOM   2143 O   ARG  307 9.385   1.601   52.187 1.000 21.01
ANISOU 2143 O   ARG  307 2574    2355    3052   174   -728 1 1 2
ATOM   2144 CB  ARG  307 7.557   2.522   54.694 1.000 27.30
ANISOU 2144 CB  ARG  307 4545    3184    2645   -13   -247 7 0 5
ATOM   2145 CG  ARG  307 6.839   3.488   55.629 1.000 46.30
ANISOU 2145 CG  ARG  307 6310    6374    4907   215   1655 -9 7 0
ATOM   2146 CD  ARG  307 7.054   3.085   57.085 1.000 66.50
ANISOU 2146 CD  ARG  307 11107   10355   3806   -2980 2792 -1145
ATOM   2147 NE  ARG  307 5.989   2.203   57.531 1.000 78.91
ANISOU 2147 NE  ARG  307 11821   12833   5330   -4530 1969 -  5
ATOM   2148 CZ  ARG  307 5.987   1.285   58.479 1.000 73.67
ANISOU 2148 CZ  ARG  307 7704    14382   5907   -4724 1249 1 0 5 1
ATOM   2149 NH1 ARG  307 7.063   1.038   59.214 1.000 80.32
ANISOU 2149 NH1 ARG  307 6613    17949   5955   -3290 2179 1 0 5
ATOM   2150 NH2 ARG  307 4.872   0.597   58.707 1.000 73.74
ANISOU 2150 NH2 ARG  307 9116    15919   2983   -6954 438  -9 1 7
ATOM   2151 N   THR  308 10.551  1.861   54.113 1.000 25.61
ANISOU 2151 N   THR  308 4234    2212    3285   536   -1421 -2 3 2
ATOM   2152 CA  THR  308 11.308  0.640   53.822 1.000 30.02
ANISOU 2152 CA  THR  308 3468    1939    5998   225   -1629 -1 9 4
ATOM   2153 C   THR  308 10.468  -0.611  54.030 1.000 25.42
ANISOU 2153 C   THR  308 2915    2190    4552   453   -626 -3 2 1
ATOM   2154 O   THR  308 9.523   -0.768  54.787 1.000 30.10
ANISOU 2154 O   THR  308 4042    3482    3912   614   -217 -1 2 5
ATOM   2155 CB  THR  308 12.581  0.531   54.688 1.000 26.09
ANISOU 2155 CB  THR  308 2701    3586    3626   242   -361 -4 5 6
ATOM   2156 OG1 THR  308 12.140  0.751   56.028 1.000 32.90
ANISOU 2156 OG1 THR  308 4146    4188    4167   504   745  -4 9 5
ATOM   2157 CG2 THR  308 13.577  1.594   54.256 1.000 31.43
ANISOU 2157 CG2 THR  308 3193    4702    4047   -577  -132 -5 3 8
ATOM   2158 N   SER  309 10.850  -1.591  53.217 1.000 24.73
ANISOU 2158 N   SER  309 2934    2092    4370   94 -574  -3 9 1
ATOM   2159 CA  SER  309 10.199  -2.897  53.230 1.000 25.19
ANISOU 2159 CA  SER  309 3793    2464    3316   -485  451  -2 3 0
ATOM   2160 C   SER  309 10.466  -3.691  54.512 1.000 24.06
ANISOU 2160 C   SER  309 2360    2888    3893   302   107  3  5
ATOM   2161 O   SER  309 11.565  -3.621  55.084 1.000 34.54
ANISOU 2161 O   SER  309 3626    2131    7366   -76   -1944  - 3 4
ATOM   2162 CB  SER  309 10.639  -3.700  52.012 1.000 26.52
ANISOU 2162 CB  SER  309 3970    2159    3948   167   580  -3 6 6
ATOM   2163 OG  SER  309 10.217  -5.039  52.148 1.000 26.34
ANISOU 2163 OG  SER  309 3198    2207    4604   156   -844 -2 6 0
ATOM   2164 N   LYS  310 9.494   -4.458  54.961 1.000 24.99
ANISOU 2164 N   LYS  310 3172    2459    3864   160   262  3 6 6
ATOM   2165 CA  LYS  310 9.651   -5.339  56.125 1.000 28.38
ANISOU 2165 CA  LYS  310 4191    3167    3427   764   278  2 8 1
ATOM   2166 C   LYS  310 9.941   -6.768  55.711 1.000 26.07
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ANISOU	2166	C	LYS	310	3371	2687	3846	168	-290	577
ATOM	2167	O	LYS	310	10.150	-7.684	56.515	1.000	33.48	
ANISOU	2167	O	LYS	310	5267	3056	4400	-66	-450	1073
ATOM	2168	CB	LYS	310	8.299	-5.367	56.858	1.000	37.77	
ANISOU	2168	CB	LYS	310	5736	4695	3921	299	1818	18
ATOM	2169	CG	LYS	310	8.014	-4.214	57.806	1.000	40.55	
ANISOU	2169	CG	LYS	310	6395	4716	4295	1525	1524	101
ATOM	2170	CD	LYS	310	6.798	-4.587	58.649	1.000	44.24	
ANISOU	2170	CD	LYS	310	9091	4224	3495	1053	2816	584
ATOM	2171	CE	LYS	310	6.722	-6.109	58.818	1.000	59.12	
ANISOU	2171	CE	LYS	310	9281	4577	8606	766	-82	2478
ATOM	2172	NZ	LYS	310	6.088	-6.563	60.089	1.000	55.80	
ANISOU	2172	NZ	LYS	310	4884	5742	10577	287	-947	4796
ATOM	2173	N	ALA	311	9.896	-7.030	54.410	1.000	22.45	
ANISOU	2173	N	ALA	311	2190	2402	3939	10	52	269
ATOM	2174	CA	ALA	311	10.360	-8.369	53.972	1.000	31.89	
ANISOU	2174	CA	ALA	311	3771	2594	5753	434	-516	-421
ATOM	2175	C	ALA	311	11.909	-8.459	53.833	1.000	23.30	
ANISOU	2175	C	ALA	311	3907	2328	2616	1393	-593	112
ATOM	2176	CB	ALA	311	9.619	-8.665	52.674	1.000	27.94	
ANISOU	2176	CB	ALA	311	2407	2878	5329	-355	542	-672
ATOM	2177	OW	HOH	501	-6.477	10.237	44.256	1.000	15.66	
ATOM	2178	OW	HOH	502	-9.349	16.189	51.010	1.000	19.26	
ATOM	2179	OW	HOH	503	-1.489	3.653	34.560	1.000	15.78	
ATOM	2180	OW	HOH	504	-10.499	18.731	50.182	1.000	16.19	
ATOM	2181	OW	HOH	505	-8.612	16.958	47.640	1.000	17.30	
ATOM	2182	OW	HOH	506	-10.255	20.839	42.881	1.000	19.05	
ATOM	2183	OW	HOH	507	2.096	1.076	32.810	1.000	29.32	
ATOM	2184	OW	HOH	508	-0.284	4.743	41.885	1.000	13.93	
ATOM	2185	OW	HOH	509	-8.525	18.553	42.416	1.000	21.33	
ATOM	2186	OW	HOH	510	3.165	2.604	43.488	1.000	24.59	
ATOM	2187	OW	HOH	511	-6.282	19.386	52.341	1.000	18.98	
ATOM	2188	OW	HOH	512	-6.826	24.638	46.833	1.000	21.77	
ATOM	2189	OW	HOH	513	10.510	-4.344	46.092	1.000	25.88	
ATOM	2190	OW	HOH	514	-0.806	16.964	40.372	1.000	16.54	
ATOM	2191	OW	HOH	515	-1.269	18.855	42.411	1.000	15.76	
ATOM	2192	OW	HOH	516	14.277	-5.146	40.175	1.000	15.53	
ATOM	2193	OW	HOH	517	-0.123	21.538	40.640	1.000	17.22	
ATOM	2194	OW	HOH	518	13.131	-0.967	51.791	1.000	31.17	
ATOM	2195	OW	HOH	519	11.009	2.875	45.599	1.000	20.20	
ATOM	2196	OW	HOH	520	5.789	13.543	45.996	1.000	17.36	
ATOM	2197	OW	HOH	521	2.168	19.767	55.925	1.000	20.41	
ATOM	2198	OW	HOH	522	8.487	15.960	34.949	1.000	15.40	
ATOM	2199	OW	HOH	523	10.794	12.697	29.921	1.000	19.99	
ATOM	2200	OW	HOH	524	-11.722	19.112	44.516	1.000	19.82	
ATOM	2201	OW	HOH	525	1.672	-2.081	35.124	1.000	16.29	
ATOM	2202	OW	HOH	526	9.651	15.283	32.342	1.000	20.37	
ATOM	2203	OW	HOH	527	28.749	31.187	52.019	1.000	18.53	
ATOM	2204	OW	HOH	528	15.326	11.252	32.041	1.000	19.60	
ATOM	2205	OW	HOH	529	26.897	26.984	52.035	1.000	19.86	
ATOM	2206	OW	HOH	530	13.528	11.592	50.915	1.000	16.17	
ATOM	2207	OW	HOH	531	25.631	32.409	52.682	1.000	19.20	
ATOM	2208	OW	HOH	532	18.287	6.835	52.185	1.000	18.49	
ATOM	2209	OW	HOH	533	12.635	29.035	39.395	1.000	18.09	
ATOM	2210	OW	HOH	534	10.797	31.968	45.659	1.000	20.66	
ATOM	2211	OW	HOH	535	10.167	24.890	33.567	1.000	19.12	
ATOM	2212	OW	HOH	536	23.530	24.122	58.531	1.000	20.39	
ATOM	2213	OW	HOH	537	23.358	12.639	35.292	1.000	22.61	
ATOM	2214	OW	HOH	538	25.879	28.699	50.264	1.000	19.44	
ATOM	2215	OW	HOH	539	11.674	16.559	30.502	1.000	18.57	
ATOM	2216	OW	HOH	540	18.515	27.775	40.042	1.000	22.23	

ATOM	2217	OW	HOH	541	21.233	20.367	33.996	1.000	21.45
ATOM	2218	OW	HOH	542	22.826	32.643	53.094	1.000	19.38
ATOM	2219	OW	HOH	543	19.670	22.387	35.310	1.000	20.05
ATOM	2220	OW	HOH	544	-13.591	21.996	61.494	1.000	49.93
ATOM	2221	OW	HOH	545	21.295	11.783	55.080	1.000	20.04
ATOM	2222	OW	HOH	546	5.431	2.533	51.677	1.000	28.11
ATOM	2223	OW	HOH	547	17.311	25.489	32.148	1.000	24.38
ATOM	2224	OW	HOH	548	17.427	7.744	33.008	1.000	20.78
ATOM	2225	OW	HOH	549	11.656	23.874	58.194	1.000	23.39
ATOM	2226	OW	HOH	550	8.037	14.987	53.326	1.000	33.52
ATOM	2227	OW	HOH	551	1.354	14.574	33.889	1.000	21.05
ATOM	2228	OW	HOH	552	11.203	20.116	63.686	1.000	24.59
ATOM	2229	OW	HOH	553	2.671	21.240	34.245	1.000	34.51
ATOM	2230	OW	HOH	554	6.339	19.832	30.751	1.000	26.36
ATOM	2231	OW	HOH	555	26.611	24.519	55.570	1.000	21.22
ATOM	2232	OW	HOH	556	27.669	17.156	53.039	1.000	25.86
ATOM	2233	OW	HOH	557	-14.392	19.977	44.154	1.000	25.03
ATOM	2234	OW	HOH	558	14.828	32.652	51.443	1.000	25.23
ATOM	2235	OW	HOH	559	17.937	7.207	54.915	1.000	20.59
ATOM	2236	OW	HOH	560	10.729	-8.875	31.499	1.000	24.65
ATOM	2237	OW	HOH	561	6.455	2.298	42.613	1.000	22.74
ATOM	2238	OW	HOH	562	13.784	31.245	44.166	1.000	27.75
ATOM	2239	OW	HOH	563	17.292	33.470	53.556	1.000	25.28
ATOM	2240	OW	HOH	564	11.210	1.109	49.697	1.000	23.33
ATOM	2241	OW	HOH	565	-11.339	25.246	41.370	1.000	26.08
ATOM	2242	OW	HOH	566	20.363	-8.375	38.242	1.000	30.07
ATOM	2243	OW	HOH	567	3.890	24.604	35.837	1.000	25.86
ATOM	2244	OW	HOH	568	5.334	11.875	43.937	1.000	25.45
ATOM	2245	OW	HOH	569	7.861	22.385	64.046	1.000	28.98
ATOM	2246	OW	HOH	570	7.754	-1.508	30.848	1.000	24.72
ATOM	2247	OW	HOH	571	6.297	3.583	28.471	1.000	33.06
ATOM	2248	OW	HOH	572	-15.790	28.800	51.855	1.000	30.09
ATOM	2249	OW	HOH	573	-5.388	20.310	38.883	1.000	23.64
ATOM	2250	OW	HOH	574	17.657	21.059	29.053	1.000	24.31
ATOM	2251	OW	HOH	575	8.763	20.920	66.102	1.000	24.81
ATOM	2252	OW	HOH	576	10.135	27.617	58.357	1.000	25.12
ATOM	2253	OW	HOH	577	7.795	1.060	29.730	1.000	29.00
ATOM	2254	OW	HOH	578	22.601	19.580	61.946	1.000	28.66
ATOM	2255	OW	HOH	579	8.859	4.744	27.898	1.000	26.12
ATOM	2256	OW	HOH	580	4.937	3.932	48.882	1.000	26.29
ATOM	2257	OW	HOH	581	17.096	5.891	35.057	1.000	23.31
ATOM	2258	OW	HOH	582	-16.337	31.047	64.719	1.000	54.01
ATOM	2259	OW	HOH	583	7.652	24.826	52.106	1.000	27.23
ATOM	2260	OW	HOH	584	7.174	24.915	29.292	1.000	26.60
ATOM	2261	OW	HOH	585	23.452	10.614	55.439	1.000	26.42
ATOM	2262	OW	HOH	586	12.640	26.413	58.676	1.000	27.15
ATOM	2263	OW	HOH	587	6.204	21.166	62.094	1.000	24.65
ATOM	2264	OW	HOH	588	2.385	0.810	37.616	1.000	19.92
ATOM	2265	OW	HOH	589	32.930	28.236	45.738	1.000	38.29
ATOM	2266	OW	HOH	590	-12.045	28.716	45.065	1.000	30.46
ATOM	2267	OW	HOH	591	0.219	13.612	36.120	1.000	27.12
ATOM	2268	OW	HOH	592	-2.525	3.881	43.344	1.000	26.67
ATOM	2269	OW	HOH	593	7.533	13.297	48.055	1.000	19.59
ATOM	2270	OW	HOH	594	-1.575	28.355	42.057	1.000	25.53
ATOM	2271	OW	HOH	595	11.209	-1.188	46.425	1.000	22.12
ATOM	2272	OW	HOH	596	5.684	-7.000	28.451	1.000	27.97
ATOM	2273	OW	HOH	597	28.868	19.406	51.825	1.000	27.72
ATOM	2274	OW	HOH	598	13.432	2.493	57.904	1.000	31.12
ATOM	2275	OW	HOH	599	8.196	7.483	27.148	1.000	29.99
ATOM	2276	OW	HOH	600	20.809	19.088	63.369	1.000	36.86
ATOM	2277	OW	HOH	601	21.352	10.656	34.614	1.000	30.60

ATOM	2278	OW	HOH	602	2.891	7.196	30.899	1.000	25.41
ATOM	2279	OW	HOH	603	8.260	26.496	34.561	1.000	35.71
ATOM	2280	OW	HOH	604	22.300	13.959	31.378	1.000	32.53
ATOM	2281	OW	HOH	605	15.689	35.750	48.870	1.000	31.17
ATOM	2282	OW	HOH	606	7.219	15.638	30.914	1.000	27.80
ATOM	2283	OW	HOH	607	-3.237	14.604	47.092	1.000	20.96
ATOM	2284	OW	HOH	608	17.543	10.581	33.561	1.000	23.51
ATOM	2285	OW	HOH	609	-1.899	36.370	44.261	1.000	32.64
ATOM	2286	OW	HOH	610	26.095	14.431	43.803	1.000	19.19
ATOM	2287	OW	HOH	611	27.664	13.183	41.954	1.000	26.48
ATOM	2288	OW	HOH	612	4.302	34.604	49.981	1.000	24.70
ATOM	2289	OW	HOH	613	-15.580	27.012	46.728	1.000	42.45
ATOM	2290	OW	HOH	614	1.615	35.544	50.347	1.000	23.78
ATOM	2291	OW	HOH	615	-10.137	34.259	49.033	1.000	23.94
ATOM	2292	OW	HOH	616	26.084	6.502	57.657	1.000	39.32
ATOM	2293	OW	HOH	617	-15.962	20.656	46.340	1.000	25.94
ATOM	2294	OW	HOH	618	6.113	29.517	40.143	1.000	29.43
ATOM	2295	OW	HOH	619	19.797	4.627	51.313	1.000	27.15
ATOM	2296	OW	HOH	620	-1.748	11.315	48.716	1.000	21.83
ATOM	2297	OW	HOH	621	11.099	34.289	44.259	1.000	27.15
ATOM	2298	OW	HOH	622	28.352	14.351	37.877	1.000	41.48
ATOM	2299	OW	HOH	623	-2.826	36.968	57.149	1.000	32.75
ATOM	2300	OW	HOH	624	16.983	9.258	29.962	1.000	32.82
ATOM	2301	OW	HOH	625	16.780	29.213	38.384	1.000	27.96
ATOM	2302	OW	HOH	626	1.632	17.213	33.689	1.000	23.17
ATOM	2303	OW	HOH	627	33.536	23.640	45.028	1.000	41.91
ATOM	2304	OW	HOH	628	23.821	6.059	50.174	1.000	34.22
ATOM	2305	OW	HOH	629	3.482	2.785	46.751	1.000	39.07
ATOM	2306	OW	HOH	630	20.218	24.803	60.918	1.000	50.12
ATOM	2307	OW	HOH	631	3.366	16.272	30.698	1.000	31.50
ATOM	2308	OW	HOH	632	18.871	11.791	31.384	1.000	30.78
ATOM	2309	OW	HOH	633	4.455	25.782	58.823	1.000	32.14
ATOM	2310	OW	HOH	634	24.721	5.202	40.319	1.000	40.13
ATOM	2311	OW	HOH	635	19.623	35.238	43.466	1.000	50.48
ATOM	2312	OW	HOH	636	22.789	26.242	60.797	1.000	26.58
ATOM	2313	OW	HOH	637	7.008	-4.809	54.039	1.000	33.89
ATOM	2314	OW	HOH	638	-15.821	18.362	42.559	1.000	29.61
ATOM	2315	OW	HOH	639	-11.847	15.711	52.841	1.000	25.21
ATOM	2316	OW	HOH	640	-1.948	13.411	35.401	1.000	30.41
ATOM	2317	OW	HOH	641	-14.293	21.937	42.145	1.000	27.58
ATOM	2318	OW	HOH	642	18.216	20.839	66.863	1.000	31.23
ATOM	2319	OW	HOH	643	9.836	36.288	48.178	1.000	44.21
ATOM	2320	OW	HOH	644	3.510	16.168	66.253	1.000	33.82
ATOM	2321	OW	HOH	645	7.571	33.398	41.687	1.000	37.96
ATOM	2322	OW	HOH	646	0.780	21.844	36.729	1.000	31.71
ATOM	2323	OW	HOH	647	21.244	-2.321	35.579	1.000	32.40
ATOM	2324	OW	HOH	648	3.027	25.244	69.907	1.000	36.84
ATOM	2325	OW	HOH	649	1.129	25.273	66.516	1.000	35.42
ATOM	2326	OW	HOH	650	14.646	7.560	60.327	1.000	46.42
ATOM	2327	OW	HOH	651	-8.287	26.381	37.998	1.000	29.17
ATOM	2328	OW	HOH	652	10.153	23.548	67.703	1.000	31.50
ATOM	2329	OW	HOH	653	28.906	22.258	38.969	1.000	32.66
ATOM	2330	OW	HOH	654	13.568	-4.482	31.517	1.000	26.94
ATOM	2331	OW	HOH	655	-12.635	17.106	55.637	1.000	26.85
ATOM	2332	OW	HOH	656	2.698	5.770	50.702	1.000	29.05
ATOM	2333	OW	HOH	657	-1.384	7.487	46.512	1.000	36.52
ATOM	2334	OW	HOH	658	3.880	19.246	31.498	1.000	31.50
ATOM	2335	OW	HOH	659	-1.400	31.406	64.001	1.000	56.62
ATOM	2336	OW	HOH	660	11.416	23.260	65.229	1.000	32.69
ATOM	2337	OW	HOH	661	15.994	14.673	25.680	1.000	36.46
ATOM	2338	OW	HOH	662	28.572	21.242	53.423	1.000	39.06

ATOM	2339	OW	HOH	663	19.354	0.465	27.273	1.000	44.56
ATOM	2340	OW	HOH	664	24.969	27.026	38.838	1.000	35.41
ATOM	2341	OW	HOH	665	24.294	7.488	55.914	1.000	32.97
ATOM	2342	OW	HOH	666	19.540	7.882	31.178	1.000	30.04
ATOM	2343	OW	HOH	667	-9.236	32.988	57.241	1.000	39.20
ATOM	2344	OW	HOH	668	2.098	18.351	67.496	1.000	38.88
ATOM	2345	OW	HOH	669	11.390	3.245	56.270	1.000	37.56
ATOM	2346	OW	HOH	670	-21.413	24.449	52.026	1.000	44.66
ATOM	2347	OW	HOH	671	-14.575	19.220	55.240	1.000	30.91
ATOM	2348	OW	HOH	672	32.112	25.958	43.051	1.000	33.34
ATOM	2349	OW	HOH	673	-15.050	31.151	53.232	1.000	34.71
ATOM	2350	OW	HOH	674	2.941	-1.607	30.245	1.000	34.63
ATOM	2351	OW	HOH	675	26.951	14.544	34.757	1.000	49.17
ATOM	2352	OW	HOH	676	14.707	30.669	39.386	1.000	30.55
ATOM	2353	OW	HOH	677	5.203	18.009	68.080	1.000	43.41
ATOM	2354	OW	HOH	678	14.151	7.965	26.591	1.000	38.80
ATOM	2355	OW	HOH	679	24.470	24.261	41.443	1.000	31.28
ATOM	2356	OW	HOH	680	17.540	2.410	28.478	1.000	34.31
ATOM	2357	OW	HOH	681	25.992	20.593	34.326	1.000	39.66
ATOM	2358	OW	HOH	682	13.802	35.357	44.421	1.000	34.06
ATOM	2359	OW	HOH	683	1.087	2.355	45.456	1.000	35.39
ATOM	2360	OW	HOH	684	22.443	34.538	42.053	1.000	33.55
ATOM	2361	OW	HOH	685	4.419	4.720	27.356	1.000	48.02
ATOM	2362	OW	HOH	686	-15.830	34.507	51.877	1.000	50.63
ATOM	2363	OW	HOH	687	-15.217	29.490	48.887	1.000	33.54
ATOM	2364	OW	HOH	688	36.808	21.183	46.206	1.000	44.97
ATOM	2365	OW	HOH	689	3.756	1.312	29.272	1.000	35.16
ATOM	2366	OW	HOH	690	18.802	13.646	27.901	1.000	30.08
ATOM	2367	OW	HOH	691	6.997	17.521	29.313	1.000	47.70
ATOM	2368	OW	HOH	692	13.725	16.327	69.105	1.000	36.97
ATOM	2369	OW	HOH	693	22.369	22.161	60.503	1.000	44.09
ATOM	2370	OW	HOH	694	-5.429	31.620	42.219	1.000	33.40
ATOM	2371	OW	HOH	695	19.351	23.082	30.744	1.000	34.21
ATOM	2372	OW	HOH	696	6.897	22.414	29.376	1.000	36.59
ATOM	2373	OW	HOH	697	28.700	7.809	57.304	1.000	38.35
ATOM	2374	OW	HOH	698	3.224	0.679	39.819	1.000	24.13
ATOM	2375	OW	HOH	699	-4.634	33.717	62.593	1.000	32.26
ATOM	2376	OW	HOH	700	32.423	17.018	43.200	1.000	43.20
ATOM	2377	OW	HOH	701	12.119	25.228	68.342	1.000	39.95
ATOM	2378	OW	HOH	702	9.307	16.477	28.976	1.000	31.75
ATOM	2379	OW	HOH	703	-11.313	34.067	46.117	1.000	49.40
ATOM	2380	OW	HOH	704	7.774	31.390	65.371	1.000	39.12
ATOM	2381	OW	HOH	705	24.764	7.530	36.802	1.000	38.55
ATOM	2382	OW	HOH	706	-22.095	25.669	59.047	1.000	36.71
ATOM	2383	OW	HOH	707	14.509	9.840	68.854	1.000	50.38
ATOM	2384	OW	HOH	708	-10.129	28.722	42.036	1.000	38.92
ATOM	2385	OW	HOH	709	29.011	34.910	48.390	1.000	35.29
ATOM	2386	OW	HOH	710	15.822	31.612	42.021	1.000	33.61
ATOM	2387	OW	HOH	711	-1.996	17.676	33.645	1.000	49.57
ATOM	2388	OW	HOH	712	10.216	17.748	26.015	1.000	41.04
ATOM	2389	OW	HOH	713	23.535	29.642	37.371	1.000	43.47
ATOM	2390	OW	HOH	714	20.488	-7.214	35.599	1.000	45.99
ATOM	2391	OW	HOH	715	11.411	10.149	25.081	1.000	41.63
ATOM	2392	OW	HOH	716	19.329	-4.258	34.139	1.000	42.50
ATOM	2393	OW	HOH	717	13.688	26.799	66.321	1.000	43.74
ATOM	2394	OW	HOH	718	-10.751	33.064	54.747	1.000	40.47
ATOM	2395	OW	HOH	719	13.800	18.258	70.756	1.000	34.54
ATOM	2396	OW	HOH	720	17.151	5.815	28.003	1.000	40.80
ATOM	2397	OW	HOH	721	0.000	0.000	36.691	0.330	27.42
ATOM	2398	OW	HOH	722	0.000	0.000	41.559	0.330	37.77
ATOM	2399	OW	HOH	723	15.314	7.549	28.791	1.000	36.24

ATOM	2400	OW	HOH	724	-1.663	19.944	39.196	1.000	33.87
ATOM	2401	OW	HOH	725	19.289	24.195	33.321	1.000	32.28
ATOM	2402	OW	HOH	726	0.000	0.000	31.798	0.330	50.38
ATOM	2403	OW	HOH	727	-1.223	38.165	59.229	1.000	31.24
ATOM	2404	OW	HOH	728	22.035	38.254	45.742	1.000	48.21
ATOM	2405	OW	HOH	729	28.388	16.248	63.044	1.000	31.59
ATOM	2406	OW	HOH	730	0.000	0.000	45.995	0.330	36.14
ATOM	2407	OW	HOH	731	2.984	29.007	40.091	1.000	36.08
ATOM	2408	OW	HOH	732	5.297	15.835	27.318	1.000	41.53
ATOM	2409	OW	HOH	733	17.347	10.778	27.373	1.000	35.27
ATOM	2410	OW	HOH	734	29.417	14.607	53.127	1.000	40.12
ATOM	2411	OW	HOH	735	4.222	-8.636	27.012	1.000	35.22
ATOM	2412	OW	HOH	736	-9.949	17.712	62.813	1.000	34.43
ATOM	2413	OW	HOH	737	13.960	-10.203	55.259	1.000	31.79
ATOM	2414	OW	HOH	738	11.831	-1.522	49.308	1.000	25.22
ATOM	2415	OW	HOH	739	2.896	4.247	29.596	1.000	38.64
ATOM	2416	OW	HOH	740	10.959	13.759	25.528	1.000	61.86
ATOM	2417	OW	HOH	741	0.864	17.227	30.557	1.000	50.71
ATOM	2418	OW	HOH	742	31.755	18.949	52.065	1.000	40.48
ATOM	2419	OW	HOH	743	21.678	-0.485	28.218	1.000	43.23
ATOM	2420	OW	HOH	744	10.583	16.397	75.211	1.000	45.04
ATOM	2421	OW	HOH	745	7.480	7.996	78.287	1.000	57.64
ATOM	2422	OW	HOH	746	24.067	35.122	40.297	1.000	41.95
ATOM	2423	OW	HOH	747	7.804	10.269	78.332	1.000	49.63
ATOM	2424	OW	HOH	748	22.131	40.645	45.806	1.000	49.69
ATOM	2425	OW	HOH	749	14.850	-4.647	33.872	1.000	42.88
ATOM	2426	OW	HOH	750	-12.930	32.504	55.211	1.000	37.15
ATOM	2427	OW	HOH	751	-4.832	35.986	43.333	1.000	44.39
ATOM	2428	OW	HOH	752	19.834	33.566	56.449	1.000	31.56
ATOM	2429	OW	HOH	753	3.363	22.310	29.844	1.000	42.02
ATOM	2430	OW	HOH	754	25.594	4.030	34.174	1.000	51.90
ATOM	2431	OW	HOH	755	28.036	35.859	46.448	1.000	39.50
ATOM	2432	OW	HOH	756	-12.951	16.294	61.787	1.000	40.94
ATOM	2433	OW	HOH	757	-10.870	26.452	38.737	1.000	44.85
ATOM	2434	OW	HOH	758	13.216	12.896	70.729	1.000	63.42
ATOM	2435	OW	HOH	759	-0.403	21.161	74.990	1.000	38.96
ATOM	2436	OW	HOH	760	-7.025	32.526	64.316	1.000	39.64
ATOM	2437	OW	HOH	761	-15.459	19.739	58.090	1.000	40.84
ATOM	2438	OW	HOH	762	-4.964	36.577	59.068	1.000	48.64
ATOM	2439	OW	HOH	763	26.807	35.717	50.036	1.000	43.54
ATOM	2440	OW	HOH	764	19.542	7.083	65.538	1.000	41.41
ATOM	2441	OW	HOH	765	3.709	35.837	42.709	1.000	33.78
ATOM	2442	OW	HOH	766	0.431	33.688	40.172	1.000	36.91
ATOM	2443	OW	HOH	767	18.620	5.064	64.617	1.000	45.76
ATOM	2444	OW	HOH	768	35.526	19.792	41.322	1.000	52.54
ATOM	2445	OW	HOH	769	19.671	7.789	67.717	1.000	43.44
ATOM	2446	OW	HOH	770	3.562	12.048	26.149	1.000	40.08
ATOM	2447	OW	HOH	771	20.245	35.637	53.927	1.000	52.16
ATOM	2448	OW	HOH	772	-20.588	25.640	61.573	1.000	58.60
ATOM	2449	OW	HOH	773	1.556	37.342	52.171	1.000	36.23
ATOM	2450	OW	HOH	774	8.340	0.668	49.382	1.000	107.24
ATOM	2451	OW	HOH	775	27.160	2.372	34.466	1.000	59.84
ATOM	2452	OW	HOH	776	6.575	19.271	25.545	1.000	36.68

ATOM	2453	OW	HOH	777	-17.605	29.205	62.661	1.000	56.83
ATOM	2454	OW	HOH	778	7.616	6.902	24.722	1.000	61.34
ATOM	2455	OW	HOH	779	19.749	10.700	68.006	1.000	65.22
ATOM	2456	W	HOH	780	7.281	-5.270	50.090	1.000	50.00
ATOM	2457	W	HOH	781	-6.809	28.483	40.515	1.000	50.00
ATOM	2458	W	HOH	782	9.990	17.263	38.636	1.000	50.00
ATOM	2459	W	HOH	783	5.767	-2.331	28.939	1.000	50.00
ATOM	2460	W	HOH	784	11.694	-0.118	24.984	1.000	50.00
ATOM	2461	W	HOH	785	24.442	7.952	47.994	1.000	50.00
ATOM	2462	W	HOH	786	14.251	36.889	46.491	1.000	50.00
ATOM	2463	W	HOH	787	5.759	26.477	33.851	1.000	50.00
ATOM	2464	W	HOH	788	-11.816	22.606	40.795	1.000	50.00
ATOM	2465	W	HOH	789	-2.531	5.579	45.829	1.000	50.00
ATOM	2466	W	HOH	790	-13.002	32.034	46.612	1.000	50.00
ATOM	2467	W	HOH	791	2.230	3.555	48.985	1.000	50.00
ATOM	2468	W	HOH	792	9.397	13.464	28.121	1.000	50.00
ATOM	2469	W	HOH	793	28.257	10.442	42.781	1.000	50.00
ATOM	2470	W	HOH	794	4.652	17.944	59.241	1.000	50.00
ATOM	2471	W	HOH	795	5.977	15.287	79.554	1.000	50.00
ATOM	2472	W	HOH	796	30.501	11.852	47.616	1.000	50.00
ATOM	2473	W	HOH	797	5.625	14.258	54.367	1.000	50.00
ATOM	2474	W	HOH	798	23.942	20.228	33.277	1.000	50.00
ATOM	2475	W	HOH	799	10.164	14.642	58.997	1.000	50.00
ATOM	2476	W	HOH	800	7.807	31.943	52.999	1.000	50.00
ATOM	2477	W	HOH	801	23.377	9.361	34.817	1.000	50.00
ATOM	2478	W	HOH	802	21.193	9.722	32.004	1.000	50.00
ATOM	2479	W	HOH	803	34.928	14.644	46.038	1.000	50.00
ATOM	2480	W	HOH	804	29.073	16.684	34.445	1.000	50.00
ATOM	2481	W	HOH	805	7.008	-2.049	51.872	1.000	50.00
ATOM	2482	W	HOH	806	25.363	7.860	45.531	1.000	50.00
ATOM	2483	W	HOH	807	30.704	8.207	55.971	1.000	50.00
ATOM	2484	W	HOH	808	33.072	24.900	40.599	1.000	50.00
ATOM	2485	W	HOH	809	-15.577	19.225	63.152	1.000	50.00
ATOM	2486	W	HOH	810	6.072	18.137	23.603	1.000	50.00
ATOM	2487	W	HOH	811	-7.214	39.940	55.639	1.000	50.00
ATOM	2488	W	HOH	812	5.509	18.517	74.919	1.000	50.00
ATOM	2489	W	HOH	813	33.845	9.908	56.672	1.000	50.00
ATOM	2490	W	HOH	814	0.421	35.779	42.931	1.000	50.00
ATOM	2491	W	HOH	815	35.282	21.705	48.656	1.000	50.00
ATOM	2492	W	HOH	816	39.344	22.173	46.871	1.000	50.00
ATOM	2493	W	HOH	817	-5.192	39.820	60.056	1.000	50.00
ATOM	2494	W	HOH	818	30.199	13.039	33.383	1.000	50.00
ATOM	2495	W	HOH	819	-4.860	36.454	61.731	1.000	50.00
ATOM	2496	W	HOH	820	-14.599	17.407	58.382	1.000	50.00
ATOM	2497	W	HOH	821	1.340	-0.111	41.711	0.500	50.00
ATOM	2498	W	HOH	822	34.512	23.218	52.108	1.000	50.00
ATOM	2499	W	HOH	823	32.136	12.571	52.190	1.000	50.00
ATOM	2500	W	HOH	824	13.525	-6.549	29.838	1.000	50.00
ATOM	2501	W	HOH	825	6.072	-4.141	27.534	1.000	50.00

STRUCTURE B

ATOM	1	CB	MET	1	31.030	11.882	57.066	1.000	50.96	
ANISOU	1	CB	MET	1	5663	3892	9809	1113	-2217	-554
ATOM	2	CG	MET	1	30.206	12.690	56.086	1.000	51.63	
ANISOU	2	CG	MET	1	6595	3775	9246	691	-1891	169
ATOM	3	SD	MET	1	28.694	11.848	55.559	1.000	40.50	
ANISOU	3	SD	MET	1	7003	3962	4424	833	-1535	-460
ATOM	4	CE	MET	1	27.852	11.584	57.120	1.000	45.32	
ANISOU	4	CE	MET	1	8632	3912	4677	-239	-653	-1702
ATOM	5	C	MET	1	31.587	13.367	58.999	1.000	52.14	
ANISOU	5	C	MET	1	6204	4752	8854	287	-2128	-63
ATOM	6	O	MET	1	31.239	12.847	60.058	1.000	52.92	
ANISOU	6	O	MET	1	7381	5242	7483	1417	-4224	519
ATOM	7	N	MET	1	33.170	11.646	58.275	1.000	57.78	
ANISOU	7	N	MET	1	4533	6034	11388	34	-1912	-811
ATOM	8	CA	MET	1	32.156	12.587	57.819	1.000	54.62	
ANISOU	8	CA	MET	1	6441	4752	9560	137	-2012	-617
ATOM	9	N	ASP	2	31.485	14.679	58.792	1.000	43.52	
ANISOU	9	N	ASP	2	3460	4866	8210	474	-2350	47
ATOM	10	CA	ASP	2	30.759	15.471	59.796	1.000	41.69	
ANISOU	10	CA	ASP	2	4439	4678	6722	-309	-2603	-31
ATOM	11	CB	ASP	2	31.206	16.912	59.644	1.000	37.89	
ANISOU	11	CB	ASP	2	3805	4768	5822	-304	-3473	266
ATOM	12	CG	ASP	2	30.219	17.958	60.121	1.000	39.59	
ANISOU	12	CG	ASP	2	4511	4616	5916	15	-3218	589
ATOM	13	OD1	ASP	2	29.325	17.637	60.933	1.000	45.10	
ANISOU	13	OD1	ASP	2	5866	4689	6581	-553	-1950	-625
ATOM	14	OD2	ASP	2	30.363	19.121	59.663	1.000	42.05	
ANISOU	14	OD2	ASP	2	5994	4341	5643	-465	-3788	145
ATOM	15	C	ASP	2	29.275	15.213	59.556	1.000	33.84	
ANISOU	15	C	ASP	2	4131	3634	5094	-59	-1682	-122
ATOM	16	O	ASP	2	28.901	15.176	58.379	1.000	29.25	
ANISOU	16	O	ASP	2	2232	4393	4489	658	-390	-615
ATOM	17	N	THR	3	28.467	15.029	60.597	1.000	29.41	
ANISOU	17	N	THR	3	4731	2636	3807	907	-2076	-284
ATOM	18	CA	THR	3	27.046	14.764	60.421	1.000	28.55	
ANISOU	18	CA	THR	3	4602	2494	3753	597	-1006	-390
ATOM	19	CB	THR	3	26.447	13.762	61.414	1.000	36.51	
ANISOU	19	CB	THR	3	7170	2209	4495	-791	-1996	52
ATOM	20	OG1	THR	3	26.629	14.220	62.758	1.000	42.45	
ANISOU	20	OG1	THR	3	9519	2620	3989	-920	-1251	383
ATOM	21	CG2	THR	3	27.153	12.412	61.315	1.000	50.26	
ANISOU	21	CG2	THR	3	9604	1863	7630	-602	-733	-333
ATOM	22	C	THR	3	26.240	16.061	60.553	1.000	29.01	
ANISOU	22	C	THR	3	4535	2548	3939	738	-1079	99
ATOM	23	O	THR	3	25.041	16.044	60.827	1.000	35.82	
ANISOU	23	O	THR	3	5149	2485	5976	390	524	-1246
ATOM	24	N	THR	4	26.928	17.181	60.332	1.000	24.98	
ANISOU	24	N	THR	4	3874	2456	3162	542	-2040	-986
ATOM	25	CA	THR	4	26.214	18.465	60.327	1.000	23.97	
ANISOU	25	CA	THR	4	3437	2426	3244	344	-1563	-375
ATOM	26	CB	THR	4	27.183	19.650	60.408	1.000	26.77	
ANISOU	26	CB	THR	4	2636	2429	5105	651	-988	-923
ATOM	27	OG1	THR	4	28.050	19.484	61.551	1.000	32.62	
ANISOU	27	OG1	THR	4	3398	2812	6184	195	-2081	-1134
ATOM	28	CG2	THR	4	26.429	20.942	60.663	1.000	26.40	
ANISOU	28	CG2	THR	4	2373	2692	4967	533	-573	-1570
ATOM	29	C	THR	4	25.325	18.577	59.097	1.000	21.64	
ANISOU	29	C	THR	4	3090	2760	2374	368	-750	-20
ATOM	30	O	THR	4	25.738	18.264	57.980	1.000	21.58	
ANISOU	30	O	THR	4	2668	2629	2902	246	-560	-659
ATOM	31	N	VAL	5	24.104	19.049	59.340	1.000	15.88	

ANISOU	31	N	VAL	5	2505	2021	1508	-613	-630 -162
ATOM	32	CA	VAL	5	23.211	19.385	58.211	1.000	14.80
ANISOU	32	CA	VAL	5	2463	1893	1266	-594	-473 -87
ATOM	33	CB	VAL	5	21.742	19.402	58.606	1.000	16.09
ANISOU	33	CB	VAL	5	2476	1881	1757	-412	-406 502
ATOM	34	CG1	VAL	5	20.855	19.846	57.447	1.000	14.91
ANISOU	34	CG1	VAL	5	2468	1859	1337	9	-102 197
ATOM	35	CG2	VAL	5	21.310	17.994	59.074	1.000	21.15
ANISOU	35	CG2	VAL	5	3015	2345	2677	-700	-418 1198
ATOM	36	C	VAL	5	23.639	20.762	57.694	1.000	17.70
ANISOU	36	C	VAL	5	2893	2085	1749	-1137	-713 103
ATOM	37	O	VAL	5	23.532	21.759	58.419	1.000	17.35
ANISOU	37	O	VAL	5	2566	1978	2050	-698	-650 105
ATOM	38	N	PRO	6	24.150	20.845	56.479	1.000	13.23
ANISOU	38	N	PRO	6	1334	1597	2097	-162	-668 409
ATOM	39	CD	PRO	6	24.302	19.770	55.484	1.000	15.56
ANISOU	39	CD	PRO	6	1887	1850	2176	-309	-383 277
ATOM	40	CA	PRO	6	24.667	22.137	56.005	1.000	14.49
ANISOU	40	CA	PRO	6	1332	1740	2432	-218	-536 522
ATOM	41	CB	PRO	6	25.571	21.722	54.847	1.000	18.21
ANISOU	41	CB	PRO	6	2294	1740	2886	-224	130 434
ATOM	42	CG	PRO	6	25.132	20.378	54.409	1.000	20.37
ANISOU	42	CG	PRO	6	2708	2632	2399	-1078	38 -61
ATOM	43	C	PRO	6	23.576	23.091	55.510	1.000	14.59
ANISOU	43	C	PRO	6	1388	1712	2443	-406	-786 698
ATOM	44	O	PRO	6	22.408	22.743	55.295	1.000	13.06
ANISOU	44	O	PRO	6	1298	1547	2118	-283	-596 15
ATOM	45	N	THR	7	24.048	24.326	55.313	1.000	14.56
ANISOU	45	N	THR	7	1393	1678	2463	-380	-565 587
ATOM	46	CA	THR	7	23.288	25.428	54.771	1.000	13.28
ANISOU	46	CA	THR	7	1463	1584	1998	-469	-734 440
ATOM	47	CB	THR	7	23.121	26.572	55.799	1.000	14.44
ANISOU	47	CB	THR	7	1927	1652	1905	-348	-1257 329
ATOM	48	OG1	THR	7	22.454	26.102	56.998	1.000	18.44
ANISOU	48	OG1	THR	7	3136	2013	1858	-333	-829 176
ATOM	49	CG2	THR	7	22.290	27.719	55.261	1.000	14.98
ANISOU	49	CG2	THR	7	1390	1788	2513	-213	-727 412
ATOM	50	C	THR	7	23.973	26.005	53.539	1.000	14.62
ANISOU	50	C	THR	7	1144	2200	2212	-355	-693 704
ATOM	51	O	THR	7	25.192	26.257	53.600	1.000	17.21
ANISOU	51	O	THR	7	1284	2515	2738	-641	-840 975
ATOM	52	N	PHE	8	23.211	26.222	52.472	1.000	12.32
ANISOU	52	N	PHE	8	1165	1596	1919	-314	-534 370
ATOM	53	CA	PHE	8	23.692	26.869	51.283	1.000	13.31
ANISOU	53	CA	PHE	8	1554	1531	1971	-60	-295 343
ATOM	54	CB	PHE	8	23.724	25.933	50.067	1.000	13.71
ANISOU	54	CB	PHE	8	1479	1705	2025	-136	-232 234
ATOM	55	CG	PHE	8	24.635	24.746	50.258	1.000	13.68
ANISOU	55	CG	PHE	8	1225	1716	2257	-185	8 155
ATOM	56	CD1	PHE	8	24.147	23.503	50.628	1.000	14.10
ANISOU	56	CD1	PHE	8	1317	1710	2329	-93	231 221
ATOM	57	CD2	PHE	8	26.006	24.882	50.079	1.000	17.52
ANISOU	57	CD2	PHE	8	1239	2282	3134	-234	-56 917
ATOM	58	CE1	PHE	8	24.984	22.420	50.812	1.000	15.39
ANISOU	58	CE1	PHE	8	1473	1878	2497	-11	242 481
ATOM	59	CE2	PHE	8	26.840	23.807	50.271	1.000	17.73
ANISOU	59	CE2	PHE	8	1179	2259	3301	-157	-143 423
ATOM	60	CZ	PHE	8	26.348	22.567	50.654	1.000	17.12
ANISOU	60	CZ	PHE	8	1310	2437	2757	24	-382 978
ATOM	61	C	PHE	8	22.821	28.073	50.909	1.000	12.76
ANISOU	61	C	PHE	8	1401	1513	1935	-164	-145 442

ATOM	62	O	PHE	8	21.602	28.033	51.079	1.000	13.18
ANISOU	62	O	PHE	8	1392	1295	2322	-256	-400 3 6 4
ATOM	63	N	SER	9	23.478	29.096	50.394	1.000	13.03
ANISOU	63	N	SER	9	1722	1636	1593	-565	-601 4 9 0
ATOM	64	CA	SER	9	22.861	30.224	49.718	1.000	12.55
ANISOU	64	CA	SER	9	1591	1468	1708	-392	-438 3 1 5
ATOM	65	CB	SER	9	23.743	31.472	49.761	1.000	15.41
ANISOU	65	CB	SER	9	2385	1833	1637	-915	-1057 7 8 3
ATOM	66	OG	SER	9	23.138	32.539	49.007	1.000	17.99
ANISOU	66	OG	SER	9	2504	1721	2611	-718	-999 9 2 4
ATOM	67	C	SER	9	22.520	29.868	48.276	1.000	12.72
ANISOU	67	C	SER	9	2040	1187	1606	-411	-576 4 7 6
ATOM	68	O	SER	9	23.397	29.495	47.478	1.000	16.18
ANISOU	68	O	SER	9	2265	2053	1830	-465	-381 7 3
ATOM	69	N	LEU	10	21.229	29.982	47.968	1.000	14.19
ANISOU	69	N	LEU	10	2154	1488	1750	-301	-699 1 7 4
ATOM	70	CA	LEU	10	20.798	29.714	46.596	1.000	14.62
ANISOU	70	CA	LEU	10	2243	1579	1734	-184	-784 2 2 4
ATOM	71	CB	LEU	10	19.291	29.883	46.436	1.000	14.72
ANISOU	71	CB	LEU	10	2222	1714	1657	-142	-657 -168
ATOM	72	CG	LEU	10	18.693	29.633	45.050	1.000	14.10
ANISOU	72	CG	LEU	10	2087	1557	1713	-702	-695 1 4 5
ATOM	73	CD1	LEU	10	18.986	28.214	44.582	1.000	16.23
ANISOU	73	CD1	LEU	10	2994	1578	1595	-554	-1132 8 7
ATOM	74	CD2	LEU	10	17.198	29.913	44.997	1.000	21.82
ANISOU	74	CD2	LEU	10	2180	2904	3206	-421	-1151 -518
ATOM	75	C	LEU	10	21.531	30.639	45.626	1.000	15.87
ANISOU	75	C	LEU	10	2449	1785	1796	-491	-844 3 1 4
ATOM	76	O	LEU	10	21.962	30.199	44.553	1.000	16.33
ANISOU	76	O	LEU	10	2607	1816	1780	-601	-829 2 7 6
ATOM	77	N	ALA	11	21.669	31.917	45.986	1.000	17.17
ANISOU	77	N	ALA	11	2521	1889	2115	-607	-548 1 3 9
ATOM	78	CA	ALA	11	22.335	32.912	45.129	1.000	16.56
ANISOU	78	CA	ALA	11	2377	1884	2029	-732	-1033 3 0 2
ATOM	79	CB	ALA	11	22.199	34.259	45.805	1.000	20.05
ANISOU	79	CB	ALA	11	3210	1877	2529	-670	-674 2 5 9
ATOM	80	C	ALA	11	23.786	32.535	44.831	1.000	16.33
ANISOU	80	C	ALA	11	2319	2255	1629	-754	-988 4 3 4
ATOM	81	O	ALA	11	24.260	32.587	43.677	1.000	19.66
ANISOU	81	O	ALA	11	3115	2559	1795	-947	-560 6 1 9
ATOM	82	N	GLU	12	24.558	32.085	45.810	1.000	17.28
ANISOU	82	N	GLU	12	2686	1994	1884	-454	-1087 3 9 0
ATOM	83	CA	GLU	12	25.931	31.654	45.752	1.000	16.34
ANISOU	83	CA	GLU	12	2703	1674	1831	-474	-889 1 0 3 3
ATOM	84	CB	GLU	12	26.527	31.477	47.158	1.000	16.09
ANISOU	84	CB	GLU	12	2440	1867	1808	-770	-820 1 0 5 8
ATOM	85	CG	GLU	12	26.633	32.802	47.915	1.000	18.90
ANISOU	85	CG	GLU	12	2717	2127	2335	-1216	-1090 7 8 8
ATOM	86	CD	GLU	12	27.115	32.657	49.342	1.000	21.17
ANISOU	86	CD	GLU	12	3300	2547	2198	-1182	-1053 7 2 4
ATOM	87	OE1	GLU	12	27.538	31.558	49.756	1.000	22.07
ANISOU	87	OE1	GLU	12	2722	3014	2650	-720	-1365 7 9 7
ATOM	88	OE2	GLU	12	27.068	33.679	50.059	1.000	29.26
ANISOU	88	OE2	GLU	12	5764	2634	2722	-1279	-1848 4 7 6
ATOM	89	C	GLU	12	25.997	30.402	44.882	1.000	17.16
ANISOU	89	C	GLU	12	2044	2319	2158	-624	-715 4 8 1
ATOM	90	O	GLU	12	26.879	30.317	44.032	1.000	18.88
ANISOU	90	O	GLU	12	3200	2388	1583	-1004	-306 8 9 9
ATOM	91	N	LEU	13	25.083	29.441	45.049	1.000	17.32
ANISOU	91	N	LEU	13	2176	2300	2104	-659	-386 9 4
ATOM	92	CA	LEU	13	25.082	28.252	44.189	1.000	14.00

ANISOU	92	CA	LEU	13	1734	1873	1713	-140 -170 4 9 8
ATOM	93	CB	LEU	13	24.003	27.248	44.620	1.000 15.37
ANISOU	93	CB	LEU	13	2205	1838	1795	-375 -149 4 6 5
ATOM	94	CG	LEU	13	24.154	26.554	45.967	1.000 14.52
ANISOU	94	CG	LEU	13	1913	1803	1799	-280 -204 4 4 2
ATOM	95	CD1	LEU	13	22.934	25.680	46.193	1.000 15.15
ANISOU	95	CD1	LEU	13	2174	1817	1766	-433 185 1 7 5
ATOM	96	CD2	LEU	13	25.411	25.690	46.067	1.000 17.54
ANISOU	96	CD2	LEU	13	2119	2043	2502	-38 -419 2 7 0
ATOM	97	C	LEU	13	24.876	28.626	42.725	1.000 16.54
ANISOU	97	C	LEU	13	2510	2062	1710	-222 -93 5 6 5
ATOM	98	O	LEU	13	25.548	28.122	41.821	1.000 18.28
ANISOU	98	O	LEU	13	2685	2514	1748	-687 75 2 5 9
ATOM	99	N	GLN	14	23.945	29.534	42.472	1.000 16.86
ANISOU	99	N	GLN	14	1970	2337	2100	-557 -683 8 3 8
ATOM	100	CA	GLN	14	23.657	30.015	41.132	1.000 18.63
ANISOU	100	CA	GLN	14	2761	2404	1915	-610 -802 5 6 8
ATOM	101	CB	GLN	14	22.421	30.923	41.130	1.000 19.39
ANISOU	101	CB	GLN	14	3166	2176	2025	-392 -918 9 7 7
ATOM	102	CG	GLN	14	21.108	30.250	41.460	1.000 19.00
ANISOU	102	CG	GLN	14	2879	2383	1957	-209 -725 4 6 0
ATOM	103	CD	GLN	14	19.974	31.227	41.766	1.000 18.83
ANISOU	103	CD	GLN	14	3139	2118	1897	-6 -1229 4 9 4
ATOM	104	OE1	GLN	14	20.177	32.317	42.314	1.000 26.10
ANISOU	104	OE1	GLN	14	3928	2407	3582	-98 -1172 -2 4 1
ATOM	105	NE2	GLN	14	18.745	30.823	41.411	1.000 20.94
ANISOU	105	NE2	GLN	14	2900	2716	2340	-149 -840 4 5 4
ATOM	106	C	GLN	14	24.804	30.812	40.525	1.000 20.40
ANISOU	106	C	GLN	14	3226	2458	2065	-795 -712 9 3 7
ATOM	107	O	GLN	14	24.812	30.951	39.311	1.000 30.48
ANISOU	107	O	GLN	14	5089	4340	2152	-2337 -898 1 2 1 1
ATOM	108	N	GLN	15	25.734	31.309	41.329	1.000 20.35
ANISOU	108	N	GLN	15	3252	2452	2030	-1067 -240 4 9 7
ATOM	109	CA	GLN	15	26.909	32.041	40.884	1.000 21.88
ANISOU	109	CA	GLN	15	3184	3230	1901	-1152 -299 7 8 8
ATOM	110	CB	GLN	15	27.288	33.100	41.920	1.000 22.20
ANISOU	110	CB	GLN	15	2720	3162	2551	-1131 -770 6 9 1
ATOM	111	CG	GLN	15	26.450	34.358	41.954	1.000 25.73
ANISOU	111	CG	GLN	15	4496	2735	2545	-821 -233 1 2 6 9
ATOM	112	CD	GLN	15	26.325	35.021	43.306	1.000 35.76
ANISOU	112	CD	GLN	15	6010	3945	3631	-643 -229 -1 3 5
ATOM	113	OE1	GLN	15	27.145	34.884	44.225	1.000 49.13
ANISOU	113	OE1	GLN	15	8425	5866	4378	-2857 -2197 -5 6 4
ATOM	114	NE2	GLN	15	25.255	35.812	43.489	1.000 51.85
ANISOU	114	NE2	GLN	15	7190	5567	6945	62 3066 1 0 7
ATOM	115	C	GLN	15	28.069	31.079	40.625	1.000 23.93
ANISOU	115	C	GLN	15	3451	3513	2127	-990 145 8 8 4
ATOM	116	O	GLN	15	29.177	31.448	40.213	1.000 28.95
ANISOU	116	O	GLN	15	3535	4619	2845	-899 510 1 2 2 5
ATOM	117	N	GLY	16	27.828	29.794	40.891	1.000 25.86
ANISOU	117	N	GLY	16	4089	3282	2457	-889 -36 4 6 9
ATOM	118	CA	GLY	16	28.812	28.763	40.649	1.000 29.00
ANISOU	118	CA	GLY	16	4785	3562	2671	-677 765 2 5 5
ATOM	119	C	GLY	16	29.741	28.546	41.814	1.000 25.45
ANISOU	119	C	GLY	16	3427	3490	2754	-264 1422 6 7 3
ATOM	120	O	GLY	16	30.805	27.955	41.625	1.000 29.63
ANISOU	120	O	GLY	16	3925	3267	4068	-66 1997 5 2 3
ATOM	121	N	LEU	17	29.387	28.979	43.015	1.000 22.50
ANISOU	121	N	LEU	17	3266	2713	2569	-39 923 7 3 3
ATOM	122	CA	LEU	17	30.234	28.727	44.172	1.000 21.73
ANISOU	122	CA	LEU	17	2299	2931	3025	-282 867 7 4 8

ATOM	123	CB	LEU	17	30.124	29.921	45.132	1.000	21.23	
ANISOU	123	CB	LEU	17	2137	2858	3071	-620	669	711
ATOM	124	CG	LEU	17	30.354	31.274	44.431	1.000	26.12	
ANISOU	124	CG	LEU	17	2708	2965	4253	-889	1342	931
ATOM	125	CD1	LEU	17	29.962	32.444	45.305	1.000	29.81	
ANISOU	125	CD1	LEU	17	2515	2924	5885	-396	464	303
ATOM	126	CD2	LEU	17	31.808	31.350	43.974	1.000	32.84	
ANISOU	126	CD2	LEU	17	2845	3703	5930	-281	1871	2114
ATOM	127	C	LEU	17	29.886	27.456	44.936	1.000	19.36	
ANISOU	127	C	LEU	17	2081	2819	2455	-239	545	580
ATOM	128	O	LEU	17	28.773	26.920	44.848	1.000	21.11	
ANISOU	128	O	LEU	17	2284	3004	2734	-444	107	1055
ATOM	129	N	HIS	18	30.838	26.952	45.706	1.000	21.02	
ANISOU	129	N	HIS	18	2124	2752	3109	-314	193	491
ATOM	130	CA	HIS	18	30.678	25.814	46.615	1.000	18.11	
ANISOU	130	CA	HIS	18	1569	2996	2315	-460	-28	361
ATOM	131	CB	HIS	18	29.655	26.149	47.702	1.000	21.25	
ANISOU	131	CB	HIS	18	1731	3332	3010	-45	282	354
ATOM	132	CG	HIS	18	29.796	27.515	48.283	1.000	23.28	
ANISOU	132	CG	HIS	18	2234	3612	2999	211	-46	-20
ATOM	133	CD2	HIS	18	28.898	28.535	48.344	1.000	24.53	
ANISOU	133	CD2	HIS	18	3112	3479	2728	532	41	440
ATOM	134	ND1	HIS	18	30.940	27.977	48.895	1.000	26.72	
ANISOU	134	ND1	HIS	18	2938	4039	3173	-151	-569	3 8
ATOM	135	CE1	HIS	18	30.756	29.218	49.307	1.000	29.80	
ANISOU	135	CE1	HIS	18	4476	3775	3071	-542	-562	237
ATOM	136	NE2	HIS	18	29.524	29.581	48.985	1.000	30.03	
ANISOU	136	NE2	HIS	18	4752	3282	3377	216	-148	338
ATOM	137	C	HIS	18	30.266	24.528	45.917	1.000	18.57	
ANISOU	137	C	HIS	18	1943	3084	2028	-951	30	590
ATOM	138	O	HIS	18	29.594	23.682	46.532	1.000	19.92	
ANISOU	138	O	HIS	18	1949	3125	2493	-777	-87	995
ATOM	139	N	GLN	19	30.647	24.340	44.658	1.000	19.24	
ANISOU	139	N	GLN	19	2329	2700	2282	-256	298	494
ATOM	140	CA	GLN	19	30.119	23.206	43.908	1.000	21.51	
ANISOU	140	CA	GLN	19	3249	2431	2492	-228	597	318
ATOM	141	CB	GLN	19	30.446	23.307	42.406	1.000	22.89	
ANISOU	141	CB	GLN	19	3231	3058	2408	-148	463	244
ATOM	142	CG	GLN	19	29.738	24.453	41.698	1.000	25.83	
ANISOU	142	CG	GLN	19	3445	3712	2658	-384	-407	568
ATOM	143	CD	GLN	19	28.223	24.470	41.747	1.000	31.56	
ANISOU	143	CD	GLN	19	3439	4722	3832	-252	-988	357
ATOM	144	OE1	GLN	19	27.521	23.640	41.153	1.000	38.51	
ANISOU	144	OE1	GLN	19	3869	3649	7115	377	-3045	686
ATOM	145	NE2	GLN	19	27.621	25.433	42.475	1.000	33.32	
ANISOU	145	NE2	GLN	19	3303	5695	3663	647	-1109	449
ATOM	146	C	GLN	19	30.578	21.873	44.485	1.000	20.32	
ANISOU	146	C	GLN	19	2224	2710	2785	-60	514	394
ATOM	147	O	GLN	19	29.806	20.900	44.473	1.000	19.08	
ANISOU	147	O	GLN	19	1888	2451	2910	221	257	743
ATOM	148	N	ASP	20	31.800	21.761	44.999	1.000	24.09	
ANISOU	148	N	ASP	20	3001	3507	2645	-773	-507	415
ATOM	149	CA	ASP	20	32.268	20.498	45.553	1.000	21.82	
ANISOU	149	CA	ASP	20	1707	3811	2774	-327	-58	357
ATOM	150	CB	ASP	20	33.780	20.527	45.779	1.000	26.34	
ANISOU	150	CB	ASP	20	1594	4552	3863	-962	236	490
ATOM	151	CG	ASP	20	34.596	20.517	44.503	1.000	34.45	
ANISOU	151	CG	ASP	20	2531	5859	4701	-1208	1213	-280
ATOM	152	OD1	ASP	20	34.177	19.982	43.457	1.000	33.11	
ANISOU	152	OD1	ASP	20	3768	4173	4640	-311	1233	-375
ATOM	153	OD2	ASP	20	35.725	21.056	44.532	1.000	49.71	

ANISOU	153	OD2	ASP	20	3445	9922	5519	-3116	1710	5 3
ATOM	154	C	ASP	20	31.538	20.179	46.862	1.000	21.03	
ANISOU	154	C	ASP	20	1876	2702	3412	-231	616	3 8 8
ATOM	155	O	ASP	20	31.118	19.038	47.075	1.000	20.80	
ANISOU	155	O	ASP	20	1162	2583	4157	-72	-139	5 5 0
ATOM	156	N	GLU	21	31.359	21.177	47.729	1.000	17.88	
ANISOU	156	N	GLU	21	1218	2751	2824	-263	-148	5 1 1
ATOM	157	CA	GLU	21	30.599	20.999	48.965	1.000	16.80	
ANISOU	157	CA	GLU	21	1128	2173	3083	-96	46	3 9 4
ATOM	158	CB	GLU	21	30.654	22.304	49.781	1.000	20.23	
ANISOU	158	CB	GLU	21	1366	2620	3701	5	-262	-210
ATOM	159	CG	GLU	21	32.040	22.669	50.307	1.000	24.60	
ANISOU	159	CG	GLU	21	1660	3325	4359	-221	-654	-301
ATOM	160	CD	GLU	21	32.860	23.565	49.402	1.000	28.46	
ANISOU	160	CD	GLU	21	1191	4348	5275	-498	-1597	1125
ATOM	161	OE1	GLU	21	33.751	24.294	49.919	1.000	31.17	
ANISOU	161	OE1	GLU	21	2360	4428	5057	-1039	-1094	3 4 9
ATOM	162	OE2	GLU	21	32.664	23.590	48.171	1.000	31.16	
ANISOU	162	OE2	GLU	21	2734	3901	5203	-1519	-1565	1123
ATOM	163	C	GLU	21	29.159	20.594	48.689	1.000	16.44	
ANISOU	163	C	GLU	21	1271	2295	2679	-165	-53	4 3 0
ATOM	164	O	GLU	21	28.599	19.700	49.329	1.000	14.30	
ANISOU	164	O	GLU	21	1271	2257	1907	-417	-301	3 6
ATOM	165	N	PHE	22	28.548	21.257	47.708	1.000	16.14	
ANISOU	165	N	PHE	22	1440	2441	2253	-316	-28	3 2 8
ATOM	166	CA	PHE	22	27.155	20.947	47.327	1.000	15.36	
ANISOU	166	CA	PHE	22	1530	2012	2294	-262	-173	2 8 1
ATOM	167	CB	PHE	22	26.612	21.967	46.343	1.000	15.43	
ANISOU	167	CB	PHE	22	1863	2056	1944	-316	-247	1 8 4
ATOM	168	CG	PHE	22	25.119	21.932	46.077	1.000	15.59	
ANISOU	168	CG	PHE	22	1822	2141	1962	-299	-170	5 6 1
ATOM	169	CD1	PHE	22	24.218	21.987	47.129	1.000	17.03	
ANISOU	169	CD1	PHE	22	1923	2605	1943	-410	-162	-40
ATOM	170	CD2	PHE	22	24.606	21.856	44.797	1.000	14.84	
ANISOU	170	CD2	PHE	22	1541	2083	2013	51	-94	-155
ATOM	171	CE1	PHE	22	22.861	21.938	46.906	1.000	15.96	
ANISOU	171	CE1	PHE	22	1844	1805	2414	-159	-64	1 7 6
ATOM	172	CE2	PHE	22	23.243	21.797	44.551	1.000	15.81	
ANISOU	172	CE2	PHE	22	1600	1993	2416	-261	-190	-176
ATOM	173	CZ	PHE	22	22.360	21.853	45.612	1.000	14.18	
ANISOU	173	CZ	PHE	22	1427	1430	2531	-105	-164	3 2 5
ATOM	174	C	PHE	22	27.049	19.515	46.792	1.000	16.23	
ANISOU	174	C	PHE	22	1325	2042	2797	-110	164	1 0 2
ATOM	175	O	PHE	22	26.183	18.751	47.229	1.000	13.24	
ANISOU	175	O	PHE	22	1411	1743	1876	105	-194	3 9 1
ATOM	176	N	ARG	23	27.888	19.097	45.853	1.000	15.45	
ANISOU	176	N	ARG	23	1585	2313	1971	-167	-80	2 8 9
ATOM	177	CA	ARG	23	27.865	17.746	45.325	1.000	15.49	
ANISOU	177	CA	ARG	23	809	2443	2634	50	-41	-22
ATOM	178	CB	ARG	23	28.928	17.539	44.248	1.000	17.81	
ANISOU	178	CB	ARG	23	966	3142	2658	-128	43	-167
ATOM	179	CG	ARG	23	28.470	17.928	42.860	1.000	25.86	
ANISOU	179	CG	ARG	23	2719	4636	2470	-758	-176	-49
ATOM	180	CD	ARG	23	29.485	17.370	41.867	1.000	34.68	
ANISOU	180	CD	ARG	23	5148	4847	3183	-1532	1634	-548
ATOM	181	NE	ARG	23	30.660	18.253	41.877	1.000	31.13	
ANISOU	181	NE	ARG	23	2799	4194	4836	305	747	6 6
ATOM	182	CZ	ARG	23	30.703	19.424	41.244	1.000	34.24	
ANISOU	182	CZ	ARG	23	2749	4844	5418	-757	239	7 6 4
ATOM	183	NH1	ARG	23	29.647	19.856	40.551	1.000	28.06	
ANISOU	183	NH1	ARG	23	2714	3685	4263	-721	555	1 8 1

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ATOM    184  NH2 ARG  23      31.830  20.114  41.340  1.000 36.08
ANISOU  184  NH2 ARG  23       2261    5328    6121    -562   776   -86
ATOM    185  C   ARG  23      28.045  16.713  46.420  1.000 15.06
ANISOU  185  C   ARG  23       1071    2061    2589     167   -32   -234
ATOM    186  O   ARG  23      27.335  15.687  46.410  1.000 16.28
ANISOU  186  O   ARG  23       1443    2244    2497    -118   -71   -277
ATOM    187  N   ARG  24      28.952  16.988  47.353  1.000 15.27
ANISOU  187  N   ARG  24       1024    2156    2623     -52   -21     29
ATOM    188  CA  ARG  24      29.193  16.003  48.430  1.000 17.70
ANISOU  188  CA  ARG  24       1443    2589    2693     275   -22     15
ATOM    189  CB  ARG  24      30.466  16.422  49.148  1.000 21.11
ANISOU  189  CB  ARG  24       1244    3486    3289     484   -257    384
ATOM    190  CG  ARG  24      31.787  16.217  48.429  1.000 30.46
ANISOU  190  CG  ARG  24       1438    5078    5057     426   441   308
ATOM    191  CD  ARG  24      32.979  16.537  49.330  1.000 33.50
ANISOU  191  CD  ARG  24       1163    5831    5736     208   370   458
ATOM    192  NE  ARG  24      33.636  17.804  49.071  1.000 51.46
ANISOU  192  NE  ARG  24       5800    7316    6437   -2596 -1688  1165
ATOM    193  CZ  ARG  24      33.973  18.776  49.903  1.000 46.72
ANISOU  193  CZ  ARG  24       4738    6888    6124   -1719 -1822  1316
ATOM    194  NH1 ARG  24      33.731  18.728  51.213  1.000 44.24
ANISOU  194  NH1 ARG  24       2650    6998    7160    -392  1001 8   4
ATOM    195  NH2 ARG  24      34.579  19.871  49.448  1.000 42.82
ANISOU  195  NH2 ARG  24       5339    4428    6503     513   -991  1216
ATOM    196  C   ARG  24      27.972  15.887  49.334  1.000 17.16
ANISOU  196  C   ARG  24       1549    2071    2900     129   140   295
ATOM    197  O   ARG  24      27.536  14.779  49.713  1.000 15.38
ANISOU  197  O   ARG  24       1706    1890    2247      72 -388   104
ATOM    198  N   CYS  25      27.355  17.011  49.696  1.000 12.91
ANISOU  198  N   CYS  25     907 1824     2176    -254  -386   151
ATOM    199  CA  CYS  25      26.105  17.040  50.454  1.000 12.45
ANISOU  199  CA  CYS  25     942 1838     1949    -178  -480    81
ATOM    200  CB  CYS  25      25.660  18.491  50.697  1.000 11.67
ANISOU  200  CB  CYS  25       1150    1759    1527    -136  -604  184
ATOM    201  SG  CYS  25      23.973  18.580  51.425  1.000 14.90
ANISOU  201  SG  CYS  25       1465    1593    2602    -164   -26   -18
ATOM    202  C   CYS  25      25.001  16.225  49.769  1.000 11.67
ANISOU  202  C   CYS  25     893 1897     1645    -283   -64   -86
ATOM    203  O   CYS  25      24.360  15.377  50.390  1.000 12.73
ANISOU  203  O   CYS  25       1347    1426    2064    -233  -196  123
ATOM    204  N   LEU  26      24.798  16.461  48.470  1.000 11.70
ANISOU  204  N   LEU  26       1102    1530    1814    -128  -390   1
ATOM    205  CA  LEU  26      23.766  15.716  47.735  1.000 11.11
ANISOU  205  CA  LEU  26       1190    1476    1556    -238   -79   -194
ATOM    206  CB  LEU  26      23.674  16.198  46.285  1.000 11.54
ANISOU  206  CB  LEU  26       1345    1522    1518     -75   -84   -202
ATOM    207  CG  LEU  26      23.242  17.638  46.019  1.000 12.42
ANISOU  207  CG  LEU  26       1199    1542    1978    -153  -167   -40
ATOM    208  CD1 LEU  26      23.414  17.993  44.539  1.000 14.77
ANISOU  208  CD1 LEU  26       1428    1916    2270      43  131   401
ATOM    209  CD2 LEU  26      21.814  17.885  46.466  1.000 14.45
ANISOU  209  CD2 LEU  26       1384    2061    2047     264   -32   321
ATOM    210  C   LEU  26      23.979  14.209  47.780  1.000 12.93
ANISOU  210  C   LEU  26       1360    1542    2011    -121  -486  -107
ATOM    211  O   LEU  26      23.011  13.461  48.008  1.000 13.78
ANISOU  211  O   LEU  26       1660    1450    2125    -305  -426   -51
ATOM    212  N   ARG  27      25.196  13.721  47.576  1.000 14.09
ANISOU  212  N   ARG  27       1518    1729    2108     151  -530  -105
ATOM    213  CA  ARG  27      25.491  12.283  47.574  1.000 15.39
ANISOU  213  CA  ARG  27       2260    1690    1897     186   141   -354
ATOM    214  CB  ARG  27      26.846  12.122  46.900  1.000 17.04
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ANISOU	214	CB	ARG	27	2259	2356	1861	517	49 -248
ATOM	215	CG	ARG	27	27.502	10.780	46.801	1.000	25.08
ANISOU	215	CG	ARG	27	3110	2837	3583	1105	606 -399
ATOM	216	CD	ARG	27	28.995	10.992	46.457	1.000	30.32
ANISOU	216	CD	ARG	27	2976	3836	4710	1190	720 -1381
ATOM	217	NE	ARG	27	29.818	11.407	47.581	1.000	36.51
ANISOU	217	NE	ARG	27	3633	4937	5301	121	391 -1429
ATOM	218	CZ	ARG	27	30.988	12.019	47.560	1.000	38.07
ANISOU	218	CZ	ARG	27	3334	5192	5941	364	661 -1776
ATOM	219	NH1	ARG	27	31.565	12.340	46.401	1.000	48.56
ANISOU	219	NH1	ARG	27	4482	7688	6280	-1305	736 -1326
ATOM	220	NH2	ARG	27	31.606	12.328	48.701	1.000	40.23
ANISOU	220	NH2	ARG	27	2891	6127	6266	457	717 -2463
ATOM	221	C	ARG	27	25.479	11.630	48.949	1.000	14.66
ANISOU	221	C	ARG	27	1720	1617	2233	135	-33 -42
ATOM	222	O	ARG	27	24.968	10.499	49.072	1.000	17.44
ANISOU	222	O	ARG	27	1981	1533	3114	98	-394 155
ATOM	223	N	ASP	28	26.031	12.308	49.973	1.000	13.72
ANISOU	223	N	ASP	28	1703	1366	2146	317	-327 319
ATOM	224	CA	ASP	28	26.227	11.701	51.277	1.000	15.33
ANISOU	224	CA	ASP	28	1886	1704	2234	538	-247 391
ATOM	225	CB	ASP	28	27.541	12.280	51.842	1.000	18.31
ANISOU	225	CB	ASP	28	2092	2709	2155	186	-465 544
ATOM	226	CG	ASP	28	28.785	11.875	51.083	1.000	23.06
ANISOU	226	CG	ASP	28	2002	3583	3176	-96	-50 478
ATOM	227	OD1	ASP	28	28.741	10.904	50.290	1.000	25.09
ANISOU	227	OD1	ASP	28	2515	2855	4163	830	406 440
ATOM	228	OD2	ASP	28	29.831	12.528	51.283	1.000	30.05
ANISOU	228	OD2	ASP	28	1919	4262	5236	-216	-695 1058
ATOM	229	C	ASP	28	25.092	11.910	52.267	1.000	14.90
ANISOU	229	C	ASP	28	2071	1435	2154	411	-203 217
ATOM	230	O	ASP	28	24.967	11.093	53.200	1.000	14.50
ANISOU	230	O	ASP	28	1878	1501	2132	444	-265 179
ATOM	231	N	LYS	29	24.317	12.975	52.096	1.000	12.90
ANISOU	231	N	LYS	29	1487	1290	2126	77	-276 136
ATOM	232	CA	LYS	29	23.265	13.368	53.029	1.000	12.95
ANISOU	232	CA	LYS	29	1369	1649	1904	8	-390 14
ATOM	233	CB	LYS	29	23.699	14.653	53.763	1.000	12.71
ANISOU	233	CB	LYS	29	1105	1581	2145	209	-359 -30
ATOM	234	CG	LYS	29	25.016	14.504	54.518	1.000	16.11
ANISOU	234	CG	LYS	29	1413	1998	2711	21	-818 -161
ATOM	235	CD	LYS	29	25.449	15.727	55.309	1.000	18.24
ANISOU	235	CD	LYS	29	2500	1989	2442	-47	-1140 -14
ATOM	236	CE	LYS	29	26.789	15.445	56.002	1.000	19.36
ANISOU	236	CE	LYS	29	2038	3171	2148	-90	-822 -725
ATOM	237	NZ	LYS	29	27.515	16.696	56.351	1.000	26.61
ANISOU	237	NZ	LYS	29	2592	3146	4373	-309	-1571 -353
ATOM	238	C	LYS	29	21.888	13.550	52.386	1.000	11.62
ANISOU	238	C	LYS	29	1432	1153	1831	52	-290 24
ATOM	239	O	LYS	29	20.877	13.028	52.880	1.000	12.57
ANISOU	239	O	LYS	29	1426	1556	1792	-97	-282 100
ATOM	240	N	GLY	30	21.779	14.280	51.284	1.000	11.98
ANISOU	240	N	GLY	30	1359	1454	1741	-5	-310 78
ATOM	241	CA	GLY	30	20.510	14.478	50.562	1.000	10.93
ANISOU	241	CA	GLY	30	1192	1497	1465	-158	-116 -18
ATOM	242	C	GLY	30	19.544	15.433	51.242	1.000	11.15
ANISOU	242	C	GLY	30	1137	1143	1955	-260	-154 -131
ATOM	243	O	GLY	30	18.337	15.374	50.963	1.000	11.26
ANISOU	243	O	GLY	30	1247	1082	1949	-56	-419 104
ATOM	244	N	LEU	31	20.064	16.278	52.129	1.000	10.54
ANISOU	244	N	LEU	31	1292	894	1821	-98	-367 89

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ATOM    245  CA  LEU  31    19.272  17.324  52.803  1.000 11.07
ANISOU  245  CA  LEU  31    1345    1111    1752     46   -520   -33
ATOM    246  CB  LEU  31    18.465  16.777  53.975  1.000 14.44
ANISOU  246  CB  LEU  31    1753    1671    2062    -284   -80  -178
ATOM    247  CG  LEU  31    19.113  16.629  55.333  1.000 17.74
ANISOU  247  CG  LEU  31    2456    2220    2064    -172  -115  499
ATOM    248  CD1 LEU  31    18.220  15.978  56.371  1.000 26.19
ANISOU  248  CD1 LEU  31    2716    4691    2543   -1224  -213 1016
ATOM    249  CD2 LEU  31    20.388  15.821  55.182  1.000 22.77
ANISOU  249  CD2 LEU  31    3121    2633    2899     650   -18  1487
ATOM    250  C   LEU  31    20.176  18.498  53.195  1.000 10.95
ANISOU  250  C   LEU  31    1041    1129    1989     180   -318  -223
ATOM    251  O   LEU  31    21.376  18.314  53.424  1.000 10.89
ANISOU  251  O   LEU  31    1015    1171    1952      69   -160   204
ATOM    252  N   PHE  32    19.570  19.688  53.219  1.000 11.42
ANISOU  252  N   PHE  32    1134     995   2211      75   -273     6   5
ATOM    253  CA  PHE  32    20.280  20.916  53.545  1.000 10.33
ANISOU  253  CA  PHE  32    1071    1152    1703     -57   -288  -33
ATOM    254  CB  PHE  32    21.244  21.307  52.422  1.000 12.25
ANISOU  254  CB  PHE  32    1054    1729    1872    -113   -173   -5
ATOM    255  CG  PHE  32    20.624  21.346  51.041  1.000 11.94
ANISOU  255  CG  PHE  32    1158    1572    1809    -281   -148  122
ATOM    256  CD1 PHE  32    20.522  20.188  50.270  1.000 11.12
ANISOU  256  CD1 PHE  32    1070    1308    1846    -182   -458  318
ATOM    257  CD2 PHE  32    20.145  22.528  50.513  1.000 12.14
ANISOU  257  CD2 PHE  32    1618    1353    1639    -300   -185  -47
ATOM    258  CE1 PHE  32    19.943  20.212  49.015  1.000 12.00
ANISOU  258  CE1 PHE  32    1342    1377    1840    -301   -468  332
ATOM    259  CE2 PHE  32    19.553  22.534  49.266  1.000 12.79
ANISOU  259  CE2 PHE  32    1858    1543    1457     -86    -34    2   8
ATOM    260  CZ  PHE  32    19.416  21.376  48.503  1.000 11.50
ANISOU  260  CZ  PHE  32    1623    1414    1331     -76   -272  217
ATOM    261  C   PHE  32    19.310  22.071  53.762  1.000  9.82
ANISOU  261  C   PHE  32    1015    1042    1674    -120   -367  -77
ATOM    262  O   PHE  32    18.165  21.990  53.285  1.000 11.29
ANISOU  262  O   PHE  32    1097    1286    1906     -95   -495  -77
ATOM    263  N   TYR  33    19.736  23.099  54.493  1.000 12.68
ANISOU  263  N   TYR  33    1606    1053    2158     -57   -766  -159
ATOM    264  CA  TYR  33    18.945  24.335  54.607  1.000 10.64
ANISOU  264  CA  TYR  33    1491    1173    1380     -77    -97  -132
ATOM    265  CB  TYR  33    19.141  25.022  55.955  1.000 10.85
ANISOU  265  CB  TYR  33    1019    1725    1379    -260   -224  -164
ATOM    266  CG  TYR  33    18.545  24.331  57.156  1.000 10.71
ANISOU  266  CG  TYR  33    1173    1552    1342     -45   -230  -117
ATOM    267  CD1 TYR  33    17.266  24.643  57.619  1.000 11.64
ANISOU  267  CD1 TYR  33    1385    1441    1596     -68    83   -94
ATOM    268  CE1 TYR  33    16.694  24.023  58.719  1.000 13.60
ANISOU  268  CE1 TYR  33    1879    1483    1804    -147   339   -26
ATOM    269  CD2 TYR  33    19.273  23.364  57.853  1.000 14.04
ANISOU  269  CD2 TYR  33    1604    2040    1689     132   -509  127
ATOM    270  CE2 TYR  33    18.711  22.752  58.964  1.000 15.75
ANISOU  270  CE2 TYR  33    1872    2227    1886    -187   -701  433
ATOM    271  CZ  TYR  33    17.438  23.078  59.387  1.000 16.02
ANISOU  271  CZ  TYR  33    2205    1939    1942    -332   -154  300
ATOM    272  OH  TYR  33    16.919  22.454  60.504  1.000 19.95
ANISOU  272  OH  TYR  33    3412    2154    2015     -60    278  400
ATOM    273  C   TYR  33    19.357  25.253  53.452  1.000 10.92
ANISOU  273  C   TYR  33    1249    1448    1453    -125   -271  149
ATOM    274  O   TYR  33    20.514  25.192  53.006  1.000 11.50
ANISOU  274  O   TYR  33    1204    1375    1791     -98   -270  281
ATOM    275  N   LEU  34    18.399  26.049  53.000  1.000 11.28
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ANISOU  275  N   LEU  34   1159   1265   1862   -210  -149  1  2  1
ATOM    276  CA  LEU  34  18.577 26.942 51.864  1.000 12.99
ANISOU  276  CA  LEU  34   1565   1444   1926    81  -478   2  7  4
ATOM    277  CB  LEU  34  17.757 26.420 50.682  1.000 13.96
ANISOU  277  CB  LEU  34   2007   1301   1995   -430  -459  3  2  1
ATOM    278  CG  LEU  34  17.990 27.112 49.334  1.000 13.81
ANISOU  278  CG  LEU  34   2085   1322   1839   -331  -365  1  9  8
ATOM    279  CD1 LEU  34  19.308 26.691 48.704  1.000 15.94
ANISOU  279  CD1 LEU  34   2123   1793   2140    -10  -313  6  0  7
ATOM    280  CD2 LEU  34  16.818 26.799 48.411  1.000 16.36
ANISOU  280  CD2 LEU  34   2186   1837   2193    122  -721  1  3  4
ATOM    281  C   LEU  34  18.195 28.361 52.241  1.000 13.03
ANISOU  281  C   LEU  34   1676   1418   1857     31  -643   2  1  8
ATOM    282  O   LEU  34  17.055 28.647 52.595  1.000 13.99
ANISOU  282  O   LEU  34   1690   1281   2344    140  -714  8  5
ATOM    283  N   THR  35  19.148 29.283 52.175  1.000 15.03
ANISOU  283  N   THR  35   1837   1584   2288   -118  -625  -  3
ATOM    284  CA  THR  35  18.918 30.704 52.369  1.000 14.80
ANISOU  284  CA  THR  35   1866   1560   2196   -169  -175  -  1  4  4
ATOM    285  CB  THR  35  20.013 31.366 53.232  1.000 15.65
ANISOU  285  CB  THR  35   2025   1719   2202   -149  -204  -  2  8  1
ATOM    286  OG1 THR  35  21.276 31.115 52.601  1.000 18.81
ANISOU  286  OG1 THR  35   1885   2679   2583   -279  -229  -  7  2  8
ATOM    287  CG2 THR  35  20.138 30.811 54.622  1.000 18.84
ANISOU  287  CG2 THR  35   2523   2207   2427   -850  -510  1  5  5
ATOM    288  C   THR  35  18.915 31.456 51.043  1.000 15.07
ANISOU  288  C   THR  35   1904   1473   2348    -57  -283  -  7  0
ATOM    289  O   THR  35  19.209 30.909 49.973  1.000 15.00
ANISOU  289  O   THR  35   2034   1520   2145   -215  -372  8  9
ATOM    290  N   ASP  36  18.564 32.739 51.086  1.000 17.46
ANISOU  290  N   ASP  36   2302   1366   2968   -209  -766  -  1  2  0
ATOM    291  CA  ASP  36  18.618 33.606 49.924  1.000 17.91
ANISOU  291  CA  ASP  36   2150   1592   3063    112  -660  8  6
ATOM    292  CB  ASP  36  20.063 33.845 49.471  1.000 17.91
ANISOU  292  CB  ASP  36   2153   1584   3067     84  -587  -  4  2
ATOM    293  CG  ASP  36  20.948 34.545 50.469  1.000 19.23
ANISOU  293  CG  ASP  36   2575   2160   2571   -642  -324  1  8  1
ATOM    294  OD1 ASP  36  20.426 35.304 51.325  1.000 24.17
ANISOU  294  OD1 ASP  36   2843   3055   3284    152  -1013  -  6  5  2
ATOM    295  OD2 ASP  36  22.199 34.355 50.412  1.000 21.00
ANISOU  295  OD2 ASP  36   2637   2571   2772   -382  -834  -  3  9  3
ATOM    296  C   ASP  36  17.783 33.038 48.784  1.000 18.20
ANISOU  296  C   ASP  36   2402   1736   2779   -446  -390  1  9  1
ATOM    297  O   ASP  36  18.222 33.063 47.629  1.000 18.98
ANISOU  297  O   ASP  36   2127   2022   3062   -464  -60  -  2  5  2
ATOM    298  N   CYS  37  16.593 32.547 49.077  1.000 17.22
ANISOU  298  N   CYS  37   1873   2190   2479     63  -350  -  1
ATOM    299  CA  CYS  37  15.730 31.945 48.043  1.000 15.98
ANISOU  299  CA  CYS  37   1997   1590   2485    -81  -65  -  1  8  4
ATOM    300  CB  CYS  37  15.621 30.423 48.252  1.000 18.87
ANISOU  300  CB  CYS  37   2112   1790   3268   -114  -405  5  7  0
ATOM    301  SG  CYS  37  14.753 29.917 49.759  1.000 19.42
ANISOU  301  SG  CYS  37   2532   1683   3164    -74  -230  3  2  2
ATOM    302  C   CYS  37  14.349 32.580 47.958  1.000 16.12
ANISOU  302  C   CYS  37   1992   1669   2465   -175  -504  1  6
ATOM    303  O   CYS  37  13.483 32.032 47.253  1.000 20.60
ANISOU  303  O   CYS  37   2761   1769   3296   -241  -1333  5  1
ATOM    304  N   GLY  38  14.125 33.714 48.617  1.000 17.89
ANISOU  304  N   GLY  38   1847   1572   3381    209  -898  -  1  1  1
ATOM    305  CA  GLY  38  12.850 34.404 48.587  1.000 18.16
ANISOU  305  CA  GLY  38   1608   2126   3164    141  -999  -  6
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ATOM	306	C	GLY	38	11.843	33.864	49.589	1.000	21.98	
ANISOU	306	C	GLY	38	2598	2574	3180	262	-97	-455
ATOM	307	O	GLY	38	10.677	34.273	49.499	1.000	22.75	
ANISOU	307	O	GLY	38	2542	3027	3073	241	79	-97
ATOM	308	N	LEU	39	12.241	32.982	50.501	1.000	21.93	
ANISOU	308	N	LEU	39	2112	3318	2903	-65	-102	-154
ATOM	309	CA	LEU	39	11.443	32.357	51.545	1.000	26.16	
ANISOU	309	CA	LEU	39	3141	3610	3188	-1071	162	-400
ATOM	310	CB	LEU	39	11.220	30.868	51.277	1.000	28.13	
ANISOU	310	CB	LEU	39	2980	3192	4516	-352	-848	258
ATOM	311	CG	LEU	39	10.296	30.434	50.157	1.000	27.39	
ANISOU	311	CG	LEU	39	3352	2591	4463	541	-637	-1052
ATOM	312	CD1	LEU	39	10.472	28.940	49.910	1.000	28.66	
ANISOU	312	CD1	LEU	39	3375	2293	5221	581	-150	-190
ATOM	313	CD2	LEU	39	8.838	30.768	50.478	1.000	30.62	
ANISOU	313	CD2	LEU	39	3155	2985	5496	1275	-1485	-208
ATOM	314	C	LEU	39	12.060	32.430	52.949	1.000	26.26	
ANISOU	314	C	LEU	39	2868	3969	3143	-796	170	335
ATOM	315	O	LEU	39	13.105	31.861	53.266	1.000	35.57	
ANISOU	315	O	LEU	39	4990	4057	4470	804	-630	320
ATOM	316	N	THR	40	11.388	33.136	53.827	1.000	26.61	
ANISOU	316	N	THR	40	3425	3883	2803	-703	-191	102
ATOM	317	CA	THR	40	11.676	33.329	55.228	1.000	22.95	
ANISOU	317	CA	THR	40	1972	3864	2886	4	-608	518
ATOM	318	C	THR	40	10.380	33.424	56.031	1.000	27.03	
ANISOU	318	C	THR	40	2331	4900	3040	-690	-220	-3
ATOM	319	O	THR	40	9.254	33.316	55.537	1.000	25.98	
ANISOU	319	O	THR	40	2148	4860	2864	-546	36	-720
ATOM	320	CB	THR	40	12.476	34.624	55.456	1.000	27.16	
ANISOU	320	CB	THR	40	2646	4799	2874	-932	-391	148
ATOM	321	OG1	THR	40	11.639	35.687	54.986	1.000	36.24	
ANISOU	321	OG1	THR	40	5158	3872	4740	-472	-136	660
ATOM	322	CG2	THR	40	13.771	34.669	54.659	1.000	34.29	
ANISOU	322	CG2	THR	40	5268	3289	4470	-1303	2206	429
ATOM	323	N	ASP	41	10.524	33.635	57.346	1.000	28.20	
ANISOU	323	N	ASP	41	2270	5223	3223	-711	-317	-479
ATOM	324	CA	ASP	41	9.324	33.604	58.191	1.000	25.10	
ANISOU	324	CA	ASP	41	1935	4633	2968	13	-551	-505
ATOM	325	C	ASP	41	8.418	34.785	57.896	1.000	24.69	
ANISOU	325	C	ASP	41	2686	3839	2855	-446	-749	-241
ATOM	326	O	ASP	41	7.219	34.846	58.163	1.000	24.79	
ANISOU	326	O	ASP	41	2757	2721	3941	174	-584	-141
ATOM	327	CB	ASP	41	9.728	33.549	59.678	1.000	28.21	
ANISOU	327	CB	ASP	41	2221	5503	2995	892	-594	-555
ATOM	328	CG	ASP	41	9.892	32.129	60.180	1.000	42.46	
ANISOU	328	CG	ASP	41	6437	5911	3784	-1196	-1257	826
ATOM	329	OD1	ASP	41	9.705	31.161	59.401	1.000	55.96	
ANISOU	329	OD1	ASP	41	12184	5138	3940	-2654	-82	1249
ATOM	330	OD2	ASP	41	10.214	31.951	61.383	1.000	61.55	
ANISOU	330	OD2	ASP	41	10370	7470	5548	-4396	-4720	2309
ATOM	331	N	THR	42	8.991	35.807	57.305	1.000	29.30	
ANISOU	331	N	THR	42	3761	4531	2839	-1404	-1089	-72
ATOM	332	CA	THR	42	8.255	36.976	56.863	1.000	33.69	
ANISOU	332	CA	THR	42	4852	3472	4475	-1524	-819	-127
ATOM	333	C	THR	42	7.199	36.598	55.834	1.000	29.14	
ANISOU	333	C	THR	42	3354	3051	4667	204	-648	-277
ATOM	334	O	THR	42	6.026	36.969	55.844	1.000	36.90	
ANISOU	334	O	THR	42	3578	2980	7462	603	-176	643
ATOM	335	CB	THR	42	9.282	37.967	56.281	1.000	40.80	
ANISOU	335	CB	THR	42	5831	4318	5354	-2254	-450	37
ATOM	336	OG1	THR	42	10.288	38.317	57.263	1.000	46.30	

ANISOU	336	OG1	THR	42	6998	3682	6912	-3163	-1478	177
ATOM	337	CG2	THR	42	8.582	39.253	55.872	1.000	45.59	
ANISOU	337	CG2	THR	42	9083	3877	4363	-2166	-1048	238
ATOM	338	N	GLU	43	7.573	35.773	54.862	1.000	31.74	
ANISOU	338	N	GLU	43	3380	4360	4319	-673	-223	-782
ATOM	339	CA	GLU	43	6.647	35.355	53.810	1.000	35.40	
ANISOU	339	CA	GLU	43	4856	4683	3913	-1510	-860	329
ATOM	340	C	GLU	43	5.643	34.324	54.330	1.000	28.03	
ANISOU	340	C	GLU	43	2988	3297	4363	-41	-919	168
ATOM	341	O	GLU	43	4.560	34.138	53.764	1.000	38.18	
ANISOU	341	O	GLU	43	3818	2970	7717	-66	-2774	1469
ATOM	342	CB	GLU	43	7.423	34.811	52.608	1.000	38.89	
ANISOU	342	CB	GLU	43	4464	6532	3779	-2546	-860	-393
ATOM	343	CG	GLU	43	8.462	35.745	52.010	1.000	45.47	
ANISOU	343	CG	GLU	43	5175	7105	5377	-2936	-92	-289
ATOM	344	CD	GLU	43	9.750	35.764	52.826	1.000	46.40	
ANISOU	344	CD	GLU	43	4506	7977	5145	-3155	548	-1210
ATOM	345	OE1	GLU	43	9.775	36.447	53.880	1.000	55.20	
ANISOU	345	OE1	GLU	43	8741	7607	4627	-2062	-1002	-669
ATOM	346	OE2	GLU	43	10.706	35.080	52.433	1.000	56.77	
ANISOU	346	OE2	GLU	43	4592	8930	8050	-2652	939	-1258
ATOM	347	N	LEU	44	5.980	33.645	55.426	1.000	22.72	
ANISOU	347	N	LEU	44	2508	2161	3964	464	-476	-450
ATOM	348	CA	LEU	44	5.117	32.592	55.959	1.000	26.76	
ANISOU	348	CA	LEU	44	4009	1973	4187	140	570	-986
ATOM	349	CB	LEU	44	5.978	31.585	56.727	1.000	28.25	
ANISOU	349	CB	LEU	44	5094	2194	3448	-153	277	-562
ATOM	350	CG	LEU	44	5.284	30.494	57.533	1.000	32.03	
ANISOU	350	CG	LEU	44	5971	2801	3398	-279	1192	-627
ATOM	351	CD1	LEU	44	4.485	29.535	56.656	1.000	37.95	
ANISOU	351	CD1	LEU	44	7665	2239	4514	-1148	2039	-1403
ATOM	352	CD2	LEU	44	6.302	29.703	58.361	1.000	36.97	
ANISOU	352	CD2	LEU	44	7096	2869	4080	1150	2171	186
ATOM	353	C	LEU	44	4.000	33.145	56.841	1.000	31.10	
ANISOU	353	C	LEU	44	3835	3182	4800	-700	837	-2205
ATOM	354	O	LEU	44	2.913	32.543	56.867	1.000	30.19	
ANISOU	354	O	LEU	44	4402	3299	3768	-1248	870	-2165
ATOM	355	N	ALA	45	4.238	34.247	57.547	1.000	28.74	
ANISOU	355	N	ALA	45	2897	2938	5083	-562	710	-2061
ATOM	356	CA	ALA	45	3.382	34.751	58.623	1.000	27.09	
ANISOU	356	CA	ALA	45	2716	2817	4761	-751	467	-2140
ATOM	357	C	ALA	45	1.943	35.014	58.195	1.000	24.95	
ANISOU	357	C	ALA	45	2697	3110	3673	-784	709	-1257
ATOM	358	O	ALA	45	1.021	34.515	58.875	1.000	22.50	
ANISOU	358	O	ALA	45	2762	2585	3201	-565	560	-1146
ATOM	359	CB	ALA	45	3.975	36.005	59.248	1.000	36.30	
ANISOU	359	CB	ALA	45	3259	4219	6315	-1912	1332	-3404
ATOM	360	N	SER	46	1.729	35.779	57.128	1.000	26.85	
ANISOU	360	N	SER	46	3258	3756	3187	-1732	618	-1184
ATOM	361	CA	SER	46	0.380	36.052	56.642	1.000	24.97	
ANISOU	361	CA	SER	46	3686	3189	2611	-1223	511	-1105
ATOM	362	CB	SER	46	0.422	36.950	55.392	1.000	32.35	
ANISOU	362	CB	SER	46	5428	3467	3395	-2232	70	-458
ATOM	363	OG	SER	46	0.630	38.289	55.772	1.000	45.77	
ANISOU	363	OG	SER	46	7730	3349	6313	-2746	2499	-807
ATOM	364	C	SER	46	-0.408	34.787	56.307	1.000	20.63	
ANISOU	364	C	SER	46	2797	2469	2572	-423	-151	-542
ATOM	365	O	SER	46	-1.578	34.672	56.698	1.000	21.93	
ANISOU	365	O	SER	46	3120	2486	2725	-559	305	-403
ATOM	366	N	ALA	47	0.211	33.855	55.590	1.000	22.39	
ANISOU	366	N	ALA	47	3096	2167	3244	-488	394	-368

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ATOM    367  CA  ALA  47  -0.397  32.596  55.176  1.000 19.54
ANISOU  367  CA  ALA  47   2746    1863    2814    -289   362   -18
ATOM    368  CB  ALA  47   0.548  31.900  54.191  1.000 23.54
ANISOU  368  CB  ALA  47   3524    1717    3705    -617  1237  -159
ATOM    369  C   ALA  47  -0.715  31.714  56.381  1.000 19.95
ANISOU  369  C   ALA  47   2282    2546    2752    -327  1925  7
ATOM    370  O   ALA  47  -1.836  31.199  56.518  1.000 19.66
ANISOU  370  O   ALA  47   2489    2589    2393    -614   211  -165
ATOM    371  N   LYS  48   0.270  31.558  57.268  1.000 18.24
ANISOU  371  N   LYS  48   2713    1966    2253    -210  -139  -912
ATOM    372  CA  LYS  48   0.042  30.782  58.486  1.000 19.33
ANISOU  372  CA  LYS  48   2398    2625    2321     43  -312  -563
ATOM    373  C   LYS  48  -1.110  31.329  59.322  1.000 20.57
ANISOU  373  C   LYS  48   2476    2556    2785    -326    83  -566
ATOM    374  O   LYS  48  -2.022  30.613  59.771  1.000 20.34
ANISOU  374  O   LYS  48   3207    2598    1923    -521   139  -340
ATOM    375  CB  LYS  48   1.352  30.758  59.294  1.000 24.61
ANISOU  375  CB  LYS  48   2400    3792    3158    -258  -556  -80
ATOM    376  CG  LYS  48   1.237  29.873  60.531  1.000 30.84
ANISOU  376  CG  LYS  48   4306    4044    3366    -291 -1504  277
ATOM    377  CD  LYS  48   1.837  30.575  61.736  1.000 41.45
ANISOU  377  CD  LYS  48   6742    5755    3251   -1067 -1382  -356
ATOM    378  CE  LYS  48   1.625  29.717  62.966  1.000 41.63
ANISOU  378  CE  LYS  48   6620    6124    3073    -466 -1047  -353
ATOM    379  NZ  LYS  48   1.074  30.497  64.112  1.000 42.62
ANISOU  379  NZ  LYS  48   5883    6866    3444     460 -1193  -425
ATOM    380  N   ASP  49  -1.110  32.625  59.607  1.000 19.18
ANISOU  380  N   ASP  49   2348    2602    2337    -464   100  -806
ATOM    381  CA  ASP  49  -2.127  33.243  60.433  1.000 21.95
ANISOU  381  CA  ASP  49   2555    2986    2801    -791   617  -1035
ATOM    382  CB  ASP  49  -1.868  34.756  60.611  1.000 23.97
ANISOU  382  CB  ASP  49   2827    2872    3409    -250   -79  -1325
ATOM    383  CG  ASP  49  -0.681  35.078  61.492  1.000 25.41
ANISOU  383  CG  ASP  49   2787    3405    3464    -365   113  -1866
ATOM    384  OD1 ASP  49  -0.153  34.153  62.143  1.000 30.75
ANISOU  384  OD1 ASP  49   3572    4181    3932    -254  -967  -1667
ATOM    385  OD2 ASP  49  -0.235  36.256  61.563  1.000 30.78
ANISOU  385  OD2 ASP  49   3303    3649    4742    -710   344  -2413
ATOM    386  C   ASP  49  -3.543  33.061  59.904  1.000 21.44
ANISOU  386  C   ASP  49   2465    2651    3030    -388   540  -900
ATOM    387  O   ASP  49  -4.476  32.770  60.654  1.000 20.72
ANISOU  387  O   ASP  49   2346    2181    3347    -279   550  -726
ATOM    388  N   LEU  50  -3.731  33.269  58.596  1.000 23.28
ANISOU  388  N   LEU  50   2942    2712    3191   -1251   216  -644
ATOM    389  CA  LEU  50  -5.086  33.185  58.068  1.000 22.94
ANISOU  389  CA  LEU  50   3104    1796    3815    -575  -205  -1079
ATOM    390  CB  LEU  50  -5.204  33.861  56.696  1.000 28.78
ANISOU  390  CB  LEU  50   3948    2453    4535    -852  -755  -254
ATOM    391  CG  LEU  50  -6.620  34.246  56.260  1.000 25.30
ANISOU  391  CG  LEU  50   3800    2294    3520     30   325  -531
ATOM    392  CD1 LEU  50  -7.552  34.478  57.441  1.000 44.77
ANISOU  392  CD1 LEU  50   6382    4432    6196    -475  3026  -1060
ATOM    393  CD2 LEU  50  -6.625  35.485  55.385  1.000 32.52
ANISOU  393  CD2 LEU  50   5861    1962    4533     752   354  -433
ATOM    394  C   LEU  50  -5.566  31.737  57.982  1.000 21.12
ANISOU  394  C   LEU  50   2559    1870    3595    -643   742  -1270
ATOM    395  O   LEU  50  -6.772  31.494  58.175  1.000 21.13
ANISOU  395  O   LEU  50   2491    2457    3083    -543   579  -1097
ATOM    396  N   VAL  51  -4.681  30.769  57.715  1.000 16.27
ANISOU  396  N   VAL  51   2517    1843    1823    -302    -3  -646
ATOM    397  CA  VAL  51  -5.186  29.370  57.701  1.000 18.07
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ANISOU	397	CA	VAL	51	3154	1763	1947	-401	-15 -427
ATOM	398	CB	VAL	51	-4.281	28.415	56.889	1.000	16.07
ANISOU	398	CB	VAL	51	2981	1629	1496	-621	-255 -501
ATOM	399	CG1	VAL	51	-3.002	28.114	57.668	1.000	18.99
ANISOU	399	CG1	VAL	51	2959	2382	1875	-383	-100 302
ATOM	400	CG2	VAL	51	-5.006	27.119	56.497	1.000	22.16
ANISOU	400	CG2	VAL	51	4569	2121	1728	-1393	64 -869
ATOM	401	C	VAL	51	-5.446	28.899	59.114	1.000	17.74
ANISOU	401	C	VAL	51	2508	2223	2009	-435	142 -445
ATOM	402	O	VAL	51	-6.430	28.187	59.346	1.000	19.76
ANISOU	402	O	VAL	51	3005	2160	2345	-692	726 -1021
ATOM	403	N	ILE	52	-4.671	29.263	60.125	1.000	20.23
ANISOU	403	N	ILE	52	2980	2945	1760	-649	364 -902
ATOM	404	CA	ILE	52	-4.990	28.875	61.507	1.000	20.17
ANISOU	404	CA	ILE	52	3200	2665	1800	-758	627 -1134
ATOM	405	CB	ILE	52	-3.847	29.230	62.469	1.000	21.31
ANISOU	405	CB	ILE	52	3294	3151	1652	-449	462 -1043
ATOM	406	CG2	ILE	52	-4.238	29.178	63.931	1.000	21.29
ANISOU	406	CG2	ILE	52	3543	2826	1719	-362	529 -689
ATOM	407	CG1	ILE	52	-2.619	28.346	62.217	1.000	25.37
ANISOU	407	CG1	ILE	52	3213	3819	2608	-307	727 -1090
ATOM	408	CD1	ILE	52	-2.871	26.872	62.470	1.000	28.56
ANISOU	408	CD1	ILE	52	3474	3578	3798	106	178 -1110
ATOM	409	C	ILE	52	-6.284	29.514	61.950	1.000	22.44
ANISOU	409	C	ILE	52	3119	3216	2190	-710	645 -1228
ATOM	410	O	ILE	52	-7.072	28.856	62.647	1.000	23.23
ANISOU	410	O	ILE	52	3390	3654	1781	-766	758 -1246
ATOM	411	N	ASP	53	-6.519	30.754	61.530	1.000	23.33
ANISOU	411	N	ASP	53	2897	3064	2903	-626	700 -1361
ATOM	412	CA	ASP	53	-7.826	31.335	61.897	1.000	24.49
ANISOU	412	CA	ASP	53	2818	3347	3141	-759	781 -1545
ATOM	413	CB	ASP	53	-7.942	32.781	61.411	1.000	27.43
ANISOU	413	CB	ASP	53	2854	3335	4235	-434	819 -1446
ATOM	414	CG	ASP	53	-9.309	33.397	61.570	1.000	30.99
ANISOU	414	CG	ASP	53	3166	4281	4326	36	1242 -1214
ATOM	415	OD1	ASP	53	-9.657	33.779	62.705	1.000	37.26
ANISOU	415	OD1	ASP	53	4369	4569	5220	153	1263 -2733
ATOM	416	OD2	ASP	53	-10.050	33.491	60.553	1.000	38.45
ANISOU	416	OD2	ASP	53	3393	6043	5173	810	557 -1648
ATOM	417	C	ASP	53	-8.953	30.495	61.316	1.000	24.64
ANISOU	417	C	ASP	53	3028	3701	2634	-919	372 -1031
ATOM	418	O	ASP	53	-10.011	30.327	61.915	1.000	28.52
ANISOU	418	O	ASP	53	3399	3835	3603	-1519	962 -2151
ATOM	419	N	PHE	54	-8.744	29.978	60.108	1.000	22.04
ANISOU	419	N	PHE	54	2921	2974	2479	-573	174 -704
ATOM	420	CA	PHE	54	-9.772	29.187	59.432	1.000	19.99
ANISOU	420	CA	PHE	54	2253	2879	2463	-421	771 -978
ATOM	421	CB	PHE	54	-9.423	29.030	57.942	1.000	18.45
ANISOU	421	CB	PHE	54	2856	1983	2171	-65	426 -518
ATOM	422	CG	PHE	54	-10.493	28.292	57.145	1.000	21.36
ANISOU	422	CG	PHE	54	3063	2735	2318	-646	599 -627
ATOM	423	CD1	PHE	54	-11.714	28.906	56.933	1.000	23.18
ANISOU	423	CD1	PHE	54	3199	2783	2826	-703	-29 -624
ATOM	424	CD2	PHE	54	-10.293	27.035	56.619	1.000	23.32
ANISOU	424	CD2	PHE	54	3482	2802	2577	-689	212 -858
ATOM	425	CE1	PHE	54	-12.719	28.291	56.241	1.000	26.45
ANISOU	425	CE1	PHE	54	3345	3696	3008	-1418	129 -554
ATOM	426	CE2	PHE	54	-11.303	26.375	55.921	1.000	25.65
ANISOU	426	CE2	PHE	54	3750	3815	2182	-1404	607 -1005
ATOM	427	CZ	PHE	54	-12.522	27.013	55.725	1.000	26.17
ANISOU	427	CZ	PHE	54	3433	3830	2679	-1829	298 -813

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ATOM    428  C   PHE  54      -9.959  27.854  60.132  1.000 19.44
ANISOU  428  C   PHE  54       2340    3430    1617    -834   319   -759
ATOM    429  O   PHE  54     -11.087  27.450  60.386  1.000 22.11
ANISOU  429  O   PHE  54       2601    3066    2734    -948  1018  -1466
ATOM    430  N   PHE  55      -8.882  27.166  60.448  1.000 20.59
ANISOU  430  N   PHE  55       2728    3375    1720    -666   180   -611
ATOM    431  CA  PHE  55      -8.966  25.927  61.212  1.000 22.59
ANISOU  431  CA  PHE  55       3092    3671    1820    -728   381   -372
ATOM    432  CB  PHE  55      -7.579  25.360  61.478  1.000 21.93
ANISOU  432  CB  PHE  55       3163    3622    1549    -692   287   -158
ATOM    433  CG  PHE  55      -6.790  24.833  60.284  1.000 20.60
ANISOU  433  CG  PHE  55       3034    2998    1793   -1004   365   -375
ATOM    434  CD1 PHE  55      -7.352  24.526  59.057  1.000 18.72
ANISOU  434  CD1 PHE  55       2300    3095    1717   -1078   586   -271
ATOM    435  CD2 PHE  55      -5.430  24.615  60.385  1.000 18.06
ANISOU  435  CD2 PHE  55       3132    2490    1241    -926   128   -497
ATOM    436  CE1 PHE  55      -6.609  24.037  58.014  1.000 18.92
ANISOU  436  CE1 PHE  55       2455    2761    1971    -844   436   -542
ATOM    437  CE2 PHE  55      -4.672  24.124  59.352  1.000 18.58
ANISOU  437  CE2 PHE  55       3291    2606    1163    -478    63   -299
ATOM    438  CZ  PHE  55      -5.256  23.814  58.134  1.000 17.68
ANISOU  438  CZ  PHE  55       2660    2567    1490    -380   129   -806
ATOM    439  C   PHE  55      -9.684  26.111  62.546  1.000 24.99
ANISOU  439  C   PHE  55       3310    4138    2046    -830   647   -415
ATOM    440  O   PHE  55     -10.532  25.281  62.872  1.000 30.29
ANISOU  440  O   PHE  55       3802    4943    2763   -1527  1314  -1102
ATOM    441  N   GLU  56      -9.330  27.144  63.311  1.000 23.65
ANISOU  441  N   GLU  56       2864    4109    2013    -634   937   -525
ATOM    442  CA  GLU  56      -9.868  27.355  64.636  1.000 30.01
ANISOU  442  CA  GLU  56       3632    5378    2394   -1050  1465   -994
ATOM    443  CB  GLU  56      -8.998  28.333  65.436  1.000 36.40
ANISOU  443  CB  GLU  56       4531    6933    2367   -1606  1318  -1623
ATOM    444  CG  GLU  56      -7.666  27.827  65.916  1.000 41.89
ANISOU  444  CG  GLU  56       5006    8196    2713   -1457   404   -1900
ATOM    445  CD  GLU  56      -6.787  28.880  66.575  1.000 48.94
ANISOU  445  CD  GLU  56       6081    9310    3202   -2278   -73   -2062
ATOM    446  OE1 GLU  56      -5.694  28.515  67.078  1.000 60.73
ANISOU  446  OE1 GLU  56       8034   12274    2769   -3208 -2335   266
ATOM    447  OE2 GLU  56      -7.145  30.084  66.614  1.000 58.51
ANISOU  447  OE2 GLU  56       8742    9338    4151   -2088  1096  -3951
ATOM    448  C   GLU  56     -11.289  27.920  64.617  1.000 30.60
ANISOU  448  C   GLU  56       3764    4923    2941    -977  1967  -1271
ATOM    449  O   GLU  56     -12.058  27.542  65.504  1.000 35.21
ANISOU  449  O   GLU  56       4384    5304    3690   -1136  2652  -1235
ATOM    450  N   HIS  57     -11.603  28.805  63.673  1.000 30.00
ANISOU  450  N   HIS  57       3730    4846    2823    -654  1684  -1582
ATOM    451  CA  HIS  57     -12.854  29.559  63.759  1.000 33.51
ANISOU  451  CA  HIS  57       3853    5101    3778    -519  1673  -1911
ATOM    452  CB  HIS  57     -12.536  31.046  63.991  1.000 33.40
ANISOU  452  CB  HIS  57       3844    5183    3664    -411  1546  -2250
ATOM    453  CG  HIS  57     -11.577  31.344  65.095  1.000 35.13
ANISOU  453  CG  HIS  57       4497    5409    3444    -505  1340  -1992
ATOM    454  CD2 HIS  57     -10.361  31.946  65.071  1.000 35.26
ANISOU  454  CD2 HIS  57       4837    5214    3345    -834   637  -1456
ATOM    455  ND1 HIS  57     -11.819  31.021  66.411  1.000 40.52
ANISOU  455  ND1 HIS  57       6021    5885    3490   -1360  1474  -2002
ATOM    456  CE1 HIS  57     -10.798  31.410  67.151  1.000 42.28
ANISOU  456  CE1 HIS  57       6680    6066    3320   -1632  1099  -1772
ATOM    457  NE2 HIS  57      -9.902  31.970  66.362  1.000 41.69
ANISOU  457  NE2 HIS  57       6377    6133    3329   -1817   407  -1148
ATOM    458  C   HIS  57     -13.769  29.466  62.547  1.000 32.58
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ANISOU  458  C   HIS  57   3083    5097    4199    -729  1723 -2066
ATOM    459  O   HIS  57  -14.902 29.965  62.578  1.000 33.80
ANISOU  459  O   HIS  57   3121    5097    4625    -731  1865 -2565
ATOM    460  N   GLY  58  -13.370 28.866  61.432  1.000 28.78
ANISOU  460  N   GLY  58   2841    4353    3742    -253  1341 -1506
ATOM    461  CA  GLY  58  -14.326 28.685  60.332  1.000 26.99
ANISOU  461  CA  GLY  58   2471    3916    3869     24 1298  -1173
ATOM    462  C   GLY  58  -15.447 27.737  60.738  1.000 29.94
ANISOU  462  C   GLY  58   2665    4357    4353    -261  1323 -1058
ATOM    463  O   GLY  58  -15.241 26.805  61.534  1.000 29.23
ANISOU  463  O   GLY  58   2976    4044    4087    -571  1192 -1297
ATOM    464  N   SER  59  -16.635 27.958  60.193  1.000 27.61
ANISOU  464  N   SER  59   2556    3905    4029    -108  1461 -1767
ATOM    465  CA  SER  59  -17.812 27.153  60.497  1.000 28.42
ANISOU  465  CA  SER  59   2675    4074    4049    -189  1294 -1325
ATOM    466  CB  SER  59  -19.121 27.889  60.162  1.000 28.29
ANISOU  466  CB  SER  59   2556    4574    3618    -339  1198 -928
ATOM    467  OG  SER  59  -19.229 27.978  58.739  1.000 28.66
ANISOU  467  OG  SER  59   3598    3742    3547     166  1729 -867
ATOM    468  C   SER  59  -17.795 25.843  59.724  1.000 29.57
ANISOU  468  C   SER  59   3467    3990    3779    -646  1463 -1206
ATOM    469  O   SER  59  -16.990 25.651  58.810  1.000 22.72
ANISOU  469  O   SER  59   3054    3042    2537    -144  648  -369
ATOM    470  N   GLU  60  -18.698 24.939  60.103  1.000 26.90
ANISOU  470  N   GLU  60   2413    3900    3907     -69  1079 -853
ATOM    471  CA  GLU  60  -18.699 23.684  59.359  1.000 26.98
ANISOU  471  CA  GLU  60   2699    3515    4037     -98   709  -537
ATOM    472  CB  GLU  60  -19.646 22.681  60.001  1.000 39.11
ANISOU  472  CB  GLU  60   5393    4393    5075   -1361 908  364
ATOM    473  CG  GLU  60  -19.011 21.665  60.917  1.000 44.63
ANISOU  473  CG  GLU  60   5606    5473    5878    -977  1079 1219
ATOM    474  CD  GLU  60  -17.507 21.543  60.797  1.000 48.52
ANISOU  474  CD  GLU  60   5714    6217    6503    -390  1207 877
ATOM    475  OE1 GLU  60  -17.030 21.223  59.684  1.000 48.11
ANISOU  475  OE1 GLU  60   5349    7545    5384     709   366  1951
ATOM    476  OE2 GLU  60  -16.828 21.763  61.829  1.000 46.50
ANISOU  476  OE2 GLU  60   4926    5742    7000    1158  1550 -1504
ATOM    477  C   GLU  60  -19.091 23.960  57.915  1.000 25.30
ANISOU  477  C   GLU  60   2829    2728    4055     86 725  -656
ATOM    478  O   GLU  60  -18.529 23.346  57.027  1.000 24.18
ANISOU  478  O   GLU  60   2119    2980    4091    -202  741  -752
ATOM    479  N   ALA  61  -20.032 24.890  57.716  1.000 25.58
ANISOU  479  N   ALA  61   2083    3206    4432     -34   612  -774
ATOM    480  CA  ALA  61  -20.495 25.212  56.368  1.000 24.05
ANISOU  480  CA  ALA  61   1838    2999    4301     228   720  -1055
ATOM    481  CB  ALA  61  -21.670 26.176  56.459  1.000 27.53
ANISOU  481  CB  ALA  61   2807    1857    5797     394   704  -606
ATOM    482  C   ALA  61  -19.385 25.790  55.500  1.000 27.31
ANISOU  482  C   ALA  61   3170    2572    4633    -377  1178 -1026
ATOM    483  O   ALA  61  -19.247 25.467  54.311  1.000 22.29
ANISOU  483  O   ALA  61   2363    1876    4232     42 661  -319
ATOM    484  N   GLU  62  -18.580 26.642  56.118  1.000 22.18
ANISOU  484  N   GLU  62   2075    2258    4094     396   569  -394
ATOM    485  CA  GLU  62  -17.455 27.258  55.416  1.000 24.19
ANISOU  485  CA  GLU  62   2401    2603    4188     150   852  -590
ATOM    486  CB  GLU  62  -16.806 28.354  56.277  1.000 24.68
ANISOU  486  CB  GLU  62   2401    2490    4485      91 1273  -828
ATOM    487  CG  GLU  62  -17.641 29.636  56.356  1.000 25.19
ANISOU  487  CG  GLU  62   2542    2620    4409     353   421  -685
ATOM    488  CD  GLU  62  -17.288 30.581  57.480  1.000 29.27
ANISOU  488  CD  GLU  62   3284    2991    4845     621   515  -1290
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ATOM    489  OE1 GLU  62    -16.527  30.241  58.410  1.000 30.11
ANISOU  489  OE1 GLU  62     3231     3067    5143     318   56  -1639
ATOM    490  OE2 GLU  62    -17.796  31.739  57.436  1.000 35.30
ANISOU  490  OE2 GLU  62     4832     2994    5584     863   109 -1327
ATOM    491  C   GLU  62    -16.409  26.226  55.025  1.000 21.70
ANISOU  491  C   GLU  62     2394     2421    3430      30 784  -579
ATOM    492  O   GLU  62    -15.818  26.218  53.940  1.000 19.44
ANISOU  492  O   GLU  62     2095     2140    3153    -301  467  -604
ATOM    493  N   LYS  63    -16.184  25.308  55.972  1.000 20.08
ANISOU  493  N   LYS  63     2472     2266    2893     -74   761  -902
ATOM    494  CA  LYS  63    -15.246  24.227  55.678  1.000 19.73
ANISOU  494  CA  LYS  63     2322     2559    2614     133   429  -903
ATOM    495  CB  LYS  63    -14.934  23.497  56.988  1.000 18.48
ANISOU  495  CB  LYS  63     1803     2743    2476    -218   587  -836
ATOM    496  CG  LYS  63    -13.946  24.240  57.881  1.000 19.17
ANISOU  496  CG  LYS  63     2115     2332    2836    -296   325  -674
ATOM    497  CD  LYS  63    -13.839  23.651  59.290  1.000 26.23
ANISOU  497  CD  LYS  63     2978     4084    2902    -888  -177 -287
ATOM    498  CE  LYS  63    -12.753  24.383  60.068  1.000 27.75
ANISOU  498  CE  LYS  63     3074     5008    2461   -1239  500  -1082
ATOM    499  NZ  LYS  63    -12.929  24.378  61.530  1.000 34.95
ANISOU  499  NZ  LYS  63     3177     7579    2524   -2594  840  -894
ATOM    500  C   LYS  63    -15.789  23.304  54.586  1.000 17.52
ANISOU  500  C   LYS  63     2014     2191    2453      51  529  -691
ATOM    501  O   LYS  63    -15.025  22.953  53.654  1.000 17.58
ANISOU  501  O   LYS  63     2266     1709    2704     158   707  -653
ATOM    502  N   ARG  64    -17.069  22.912  54.641  1.000 19.63
ANISOU  502  N   ARG  64     2081     2452    2926     -14   614  -592
ATOM    503  CA  ARG  64    -17.618  22.041  53.595  1.000 19.00
ANISOU  503  CA  ARG  64     1509     2526    3185    -3 620  -652
ATOM    504  C   ARG  64    -17.471  22.634  52.194  1.000 20.42
ANISOU  504  C   ARG  64     2165     2436    3157     -390  -22  -536
ATOM    505  O   ARG  64    -17.204  21.934  51.195  1.000 18.83
ANISOU  505  O   ARG  64     1854     2184    3115     -434  575  -201
ATOM    506  CB  ARG  64    -19.080  21.670  53.871  1.000 24.70
ANISOU  506  CB  ARG  64     1470     3652    4263      -51   841  -909
ATOM    507  CG  ARG  64    -19.838  20.933  52.795  1.000 36.49
ANISOU  507  CG  ARG  64     2961     5284    5621    -2020  138  -882
ATOM    508  CD  ARG  64    -21.315  20.645  53.095  1.000 46.32
ANISOU  508  CD  ARG  64     3034     6962    7603    -2438  327  -1187
ATOM    509  NE  ARG  64    -21.776  21.216  54.331  1.000 55.81
ANISOU  509  NE  ARG  64     3917     8636    8652    -3960 2222 -1870
ATOM    510  CZ  ARG  64    -22.814  21.840  54.811  1.000 58.82
ANISOU  510  CZ  ARG  64     4438     8939    8972    -3479 1988 -2480
ATOM    511  NH1 ARG  64    -23.884  22.106  54.071  1.000 76.83
ANISOU  511  NH1 ARG  64     6024     9527   13641    -1787 -165 -1872
ATOM    512  NH2 ARG  64    -22.797  22.213  56.093  1.000 69.53
ANISOU  512  NH2 ARG  64     7792     9201    9424    -5884 3891 -3304
ATOM    513  N   ALA  65    -17.621  23.947  52.066  1.000 20.43
ANISOU  513  N   ALA  65     1689     2554    3519      24 612  -525
ATOM    514  CA  ALA  65    -17.505  24.656  50.782  1.000 19.45
ANISOU  514  CA  ALA  65     1649     2216    3523      409   184  -553
ATOM    515  CB  ALA  65    -17.912  26.108  50.984  1.000 23.73
ANISOU  515  CB  ALA  65     1420     2019    5579      126  -373 -742
ATOM    516  C   ALA  65    -16.118  24.549  50.168  1.000 17.89
ANISOU  516  C   ALA  65     1524     2099    3173      -47   108  -101
ATOM    517  O   ALA  65    -15.983  24.732  48.954  1.000 18.77
ANISOU  517  O   ALA  65     1830     2178    3123      122   -8  -229
ATOM    518  N   VAL  66    -15.100  24.248  50.973  1.000 17.99
ANISOU  518  N   VAL  66     1547     2151    3137      -86   36  -196
ATOM    519  CA  VAL  66    -13.746  24.066  50.430  1.000 16.74
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ANISOU  519  CA  VAL  66   1553    1859    2948    -62   -56  -254
ATOM    520  CB  VAL  66  -12.775 25.151  50.951  1.000 17.29
ANISOU  520  CB  VAL  66   1805    1804    2963    -330  338  -185
ATOM    521  CG1 VAL  66  -13.238 26.532  50.455  1.000 16.70
ANISOU  521  CG1 VAL  66   1547    1800    2997    111   545  -553
ATOM    522  CG2 VAL  66  -12.652 25.180  52.462  1.000 18.65
ANISOU  522  CG2 VAL  66   2053    1996    3036    -193  17  -538
ATOM    523  C   VAL  66  -13.201 22.680  50.724  1.000 15.66
ANISOU  523  C   VAL  66   1775    1813    2362    -70   -250 -457
ATOM    524  O   VAL  66  -11.972 22.493  50.808  1.000 14.19
ANISOU  524  O   VAL  66   1747    1576    2069    -122  -56  -347
ATOM    525  N   THR  67  -14.071 21.695  50.873  1.000 14.46
ANISOU  525  N   THR  67   1550    1602    2343    126   -48  -722
ATOM    526  CA  THR  67  -13.723 20.279  51.000  1.000 14.06
ANISOU  526  CA  THR  67   1461    1698    2185    234   5  -740
ATOM    527  CB  THR  67  -14.419 19.647  52.225  1.000 15.08
ANISOU  527  CB  THR  67   1721    1955    2053    -51   -426 -444
ATOM    528  OG1 THR  67  -14.089 20.337  53.453  1.000 17.41
ANISOU  528  OG1 THR  67   2538    1949    2128    -39   70  -716
ATOM    529  CG2 THR  67  -13.915 18.215  52.420  1.000 16.63
ANISOU  529  CG2 THR  67   2182    1888    2248    148   293  -658
ATOM    530  C   THR  67  -14.067 19.518  49.728  1.000 12.37
ANISOU  530  C   THR  67   1144    1422    2132    209   -95  -517
ATOM    531  O   THR  67  -15.208 19.567  49.229  1.000 14.82
ANISOU  531  O   THR  67   1197    2086    2350    208   -168 -362
ATOM    532  N   SER  68  -13.092 18.790  49.180  1.000 11.61
ANISOU  532  N   SER  68   1109    1421    1881    37 -58  -534
ATOM    533  CA  SER  68  -13.306 17.955  48.003  1.000 11.45
ANISOU  533  CA  SER  68   1274    1444    1631    -49   -30  -374
ATOM    534  CB  SER  68  -12.027 17.317  47.480  1.000 11.88
ANISOU  534  CB  SER  68   1446    1523    1544    79 252  -157
ATOM    535  OG  SER  68  -11.026 18.292  47.239  1.000 16.95
ANISOU  535  OG  SER  68   1557    2314    2569    -336  389  -218
ATOM    536  C   SER  68  -14.269 16.815  48.319  1.000 11.56
ANISOU  536  C   SER  68   1287    1375    1732    -61   53  -406
ATOM    537  O   SER  68  -14.308 16.384  49.476  1.000 14.62
ANISOU  537  O   SER  68   1998    1860    1697    -538  153  -430
ATOM    538  N   PRO  69  -15.026 16.324  47.344  1.000 12.78
ANISOU  538  N   PRO  69   1476    1473    1905    -243  -88  -194
ATOM    539  CD  PRO  69  -15.130 16.801  45.953  1.000 12.47
ANISOU  539  CD  PRO  69   1022    1808    1909    -199  -203 -144
ATOM    540  CA  PRO  69  -15.941 15.214  47.639  1.000 12.21
ANISOU  540  CA  PRO  69   1358    1369    1913    -178  148  -437
ATOM    541  CB  PRO  69  -16.825 15.193  46.355  1.000 13.94
ANISOU  541  CB  PRO  69   1362    1591    2343    -251  -178 -14
ATOM    542  CG  PRO  69  -15.924 15.715  45.290  1.000 14.38
ANISOU  542  CG  PRO  69   1396    1947    2122    -554  -511 178
ATOM    543  C   PRO  69  -15.270 13.882  47.912  1.000 13.25
ANISOU  543  C   PRO  69   1206    1526    2303    -217  -115 -100
ATOM    544  O   PRO  69  -15.932 12.985  48.481  1.000 14.01
ANISOU  544  O   PRO  69   1753    1450    2122    -373  99  -301
ATOM    545  N   VAL  70  -14.015 13.692  47.554  1.000 13.46
ANISOU  545  N   VAL  70   1288    1479    2348    -174  -108 -265
ATOM    546  CA  VAL  70  -13.184 12.548  47.898  1.000 13.49
ANISOU  546  CA  VAL  70   1404    1692    2030    37 138  -195
ATOM    547  CB  VAL  70  -12.587 11.720  46.737  1.000 16.39
ANISOU  547  CB  VAL  70   2142    1648    2439    -225  614  -452
ATOM    548  CG1 VAL  70  -13.615 10.756  46.208  1.000 33.50
ANISOU  548  CG1 VAL  70   6470    2984    3274    -2702 41  -867
ATOM    549  CG2 VAL  70  -11.995 12.613  45.640  1.000 16.46
ANISOU  549  CG2 VAL  70   1749    2234    2273    269   444  2  3
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ATOM	550	C	VAL	70	-12.042	13.057	48.782	1.000	13.59
ANISOU	550	C	VAL	70	1618	1382	2163	-38	-114 1 2 7
ATOM	551	O	VAL	70	-11.426	14.105	48.493	1.000	14.20
ANISOU	551	O	VAL	70	1748	1685	1964	-265	26 1 8 2
ATOM	552	N	PRO	71	-11.786	12.365	49.898	1.000	14.21
ANISOU	552	N	PRO	71	1607	1507	2285	-115	-62 3 1 0
ATOM	553	CD	PRO	71	-12.432	11.125	50.378	1.000	14.70
ANISOU	553	CD	PRO	71	1920	1590	2076	-201	646 4
ATOM	554	CA	PRO	71	-10.830	12.919	50.878	1.000	17.41
ANISOU	554	CA	PRO	71	2429	2008	2178	-522	-342 4 1 8
ATOM	555	CB	PRO	71	-11.338	12.304	52.193	1.000	20.87
ANISOU	555	CB	PRO	71	3768	2082	2081	-743	190 1 4
ATOM	556	CG	PRO	71	-11.908	10.989	51.775	1.000	18.28
ANISOU	556	CG	PRO	71	3534	1665	1746	-338	781 -5 4
ATOM	557	C	PRO	71	-9.384	12.543	50.619	1.000	17.14
ANISOU	557	C	PRO	71	2183	2304	2026	-684	-815 4 4
ATOM	558	O	PRO	71	-8.730	11.796	51.330	1.000	20.54
ANISOU	558	O	PRO	71	2745	2610	2448	-87	-404 4 1 4
ATOM	559	N	THR	72	-8.834	13.111	49.556	1.000	16.59
ANISOU	559	N	THR	72	2156	2046	2103	-235	-508 -1 7
ATOM	560	CA	THR	72	-7.496	12.818	49.090	1.000	17.43
ANISOU	560	CA	THR	72	2113	1884	2626	-254	-510 -2 8 8
ATOM	561	CB	THR	72	-7.477	12.829	47.545	1.000	15.98
ANISOU	561	CB	THR	72	1700	1761	2611	211	-458 -4 2 1
ATOM	562	OG1	THR	72	-8.027	14.094	47.128	1.000	17.28
ANISOU	562	OG1	THR	72	2146	1553	2868	27	-355 -2 7 1
ATOM	563	CG2	THR	72	-8.348	11.764	46.929	1.000	12.63
ANISOU	563	CG2	THR	72	1296	1581	1923	-46	328 -1 2 7
ATOM	564	C	THR	72	-6.418	13.805	49.549	1.000	17.83
ANISOU	564	C	THR	72	2153	1773	2847	-155	-1228 2 3 2
ATOM	565	O	THR	72	-5.216	13.536	49.329	1.000	20.17
ANISOU	565	O	THR	72	2142	2265	3257	-225	-1049 4 8 0
ATOM	566	N	MET	73	-6.785	14.920	50.169	1.000	19.43
ANISOU	566	N	MET	73	2876	2052	2455	-782	-451 -1 4 4
ATOM	567	CA	MET	73	-5.799	15.944	50.521	1.000	18.75
ANISOU	567	CA	MET	73	2117	2326	2682	-538	-466 -2 8 0
ATOM	568	CB	MET	73	-4.758	15.338	51.480	1.000	22.03
ANISOU	568	CB	MET	73	1826	2825	3718	-377	-306 5 9 5
ATOM	569	CG	MET	73	-5.374	15.059	52.843	1.000	27.01
ANISOU	569	CG	MET	73	3545	2853	3864	-84	-87 1 5 2 6
ATOM	570	SD	MET	73	-4.107	14.850	54.107	1.000	32.23
ANISOU	570	SD	MET	73	4364	4245	3637	469	-400 5 8 3
ATOM	571	CE	MET	73	-3.179	13.492	53.374	1.000	26.74
ANISOU	571	CE	MET	73	2885	4895	2381	326	425 1 3 4 8
ATOM	572	C	MET	73	-5.066	16.582	49.355	1.000	17.20
ANISOU	572	C	MET	73	1338	2129	3067	-20	-269 -1 7 5
ATOM	573	O	MET	73	-3.945	17.110	49.498	1.000	21.20
ANISOU	573	O	MET	73	1713	2512	3832	-541	51 -1 0 2 4
ATOM	574	N	ARG	74	-5.630	16.600	48.175	1.000	18.64
ANISOU	574	N	ARG	74	1881	2051	3150	84	-461 5 4 3
ATOM	575	CA	ARG	74	-5.091	17.180	46.967	1.000	15.73
ANISOU	575	CA	ARG	74	937	1986	3053	169	27 -1 7 4
ATOM	576	CB	ARG	74	-5.655	16.537	45.704	1.000	16.53
ANISOU	576	CB	ARG	74	1711	1434	3137	-263	142 -1 6 0
ATOM	577	CG	ARG	74	-4.911	16.934	44.440	1.000	15.01
ANISOU	577	CG	ARG	74	1270	1288	3144	-156	279 -5 5 4
ATOM	578	CD	ARG	74	-5.683	16.543	43.185	1.000	16.10
ANISOU	578	CD	ARG	74	1967	1031	3120	268	-92 -4 0 7
ATOM	579	NE	ARG	74	-4.902	16.816	41.966	1.000	18.81
ANISOU	579	NE	ARG	74	2259	1813	3075	-432	-252 -2 9 6
ATOM	580	CZ	ARG	74	-5.033	17.824	41.130	1.000	16.64

ANISOU 580	CZ	ARG	74	1968	1646	2709	-141	-190 -596
ATOM 581	NH1	ARG	74	-5.951	18.775	41.293	1.000	20.09
ANISOU 581	NH1	ARG	74	1899	2075	3660	54	-353 -788
ATOM 582	NH2	ARG	74	-4.220	17.896	40.068	1.000	20.12
ANISOU 582	NH2	ARG	74	2366	2844	2437	153	-196 -400
ATOM 583	C	ARG	74	-5.373	18.681	46.966	1.000	12.70
ANISOU 583	C	ARG	74	1187	1880	1758	6	-22 -136
ATOM 584	O	ARG	74	-4.501	19.465	46.582	1.000	14.07
ANISOU 584	O	ARG	74	1049	2048	2247	-221	-170 -480
ATOM 585	N	ARG	75	-6.567	19.099	47.387	1.000	12.72
ANISOU 585	N	ARG	75	1402	1702	1728	95	182 -108
ATOM 586	CA	ARG	75	-7.006	20.471	47.308	1.000	13.40
ANISOU 586	CA	ARG	75	1924	1618	1548	87	275 -193
ATOM 587	CB	ARG	75	-7.737	20.784	45.995	1.000	13.45
ANISOU 587	CB	ARG	75	1972	1387	1751	-179	51 - 9
ATOM 588	CG	ARG	75	-6.908	20.637	44.721	1.000	13.38
ANISOU 588	CG	ARG	75	1638	1851	1594	78	-217 101
ATOM 589	CD	ARG	75	-5.849	21.708	44.582	1.000	12.85
ANISOU 589	CD	ARG	75	1537	1602	1741	237	62 -15
ATOM 590	NE	ARG	75	-5.087	21.685	43.347	1.000	13.71
ANISOU 590	NE	ARG	75	1708	1797	1705	188	90 - 91
ATOM 591	CZ	ARG	75	-3.984	21.036	43.013	1.000	12.46
ANISOU 591	CZ	ARG	75	1348	1656	1731	-89	86 117
ATOM 592	NH1	ARG	75	-3.418	20.241	43.894	1.000	14.64
ANISOU 592	NH1	ARG	75	1933	1794	1834	186	-91 6 5
ATOM 593	NH2	ARG	75	-3.444	21.167	41.794	1.000	13.72
ANISOU 593	NH2	ARG	75	1510	2037	1667	-136	84 - 83
ATOM 594	C	ARG	75	-7.948	20.787	48.475	1.000	12.74
ANISOU 594	C	ARG	75	1400	1656	1784	-209	214 -464
ATOM 595	O	ARG	75	-8.780	19.944	48.818	1.000	14.60
ANISOU 595	O	ARG	75	1348	1926	2273	-427	156 -480
ATOM 596	N	GLY	76	-7.830	21.955	49.078	1.000	11.92
ANISOU 596	N	GLY	76	1268	1537	1724	-22	34 -389
ATOM 597	CA	GLY	76	-8.801	22.395	50.070	1.000	12.44
ANISOU 597	CA	GLY	76	1439	1493	1796	-315	263 -412
ATOM 598	C	GLY	76	-8.536	21.857	51.469	1.000	12.50
ANISOU 598	C	GLY	76	1324	1527	1900	5	326 -273
ATOM 599	O	GLY	76	-7.388	21.517	51.769	1.000	14.25
ANISOU 599	O	GLY	76	1100	2099	2218	-277	239 -225
ATOM 600	N	PHE	77	-9.574	21.840	52.287	1.000	12.65
ANISOU 600	N	PHE	77	1191	1806	1809	-162	231 -351
ATOM 601	CA	PHE	77	-9.526	21.474	53.694	1.000	14.00
ANISOU 601	CA	PHE	77	1295	2110	1914	-260	276 -138
ATOM 602	CB	PHE	77	-10.644	22.226	54.451	1.000	14.73
ANISOU 602	CB	PHE	77	1554	2169	1874	-402	485 -317
ATOM 603	CG	PHE	77	-10.773	21.824	55.912	1.000	17.13
ANISOU 603	CG	PHE	77	1927	2730	1849	-374	378 -243
ATOM 604	CD1	PHE	77	-9.949	22.369	56.886	1.000	19.49
ANISOU 604	CD1	PHE	77	2744	2700	1962	-119	219 -789
ATOM 605	CD2	PHE	77	-11.730	20.902	56.309	1.000	19.13
ANISOU 605	CD2	PHE	77	2348	3068	1852	-501	864 -165
ATOM 606	CE1	PHE	77	-10.068	21.973	58.217	1.000	19.75
ANISOU 606	CE1	PHE	77	2956	2381	2168	-174	-313 -304
ATOM 607	CE2	PHE	77	-11.829	20.479	57.627	1.000	18.73
ANISOU 607	CE2	PHE	77	2565	2711	1841	-382	310 - 77
ATOM 608	CZ	PHE	77	-10.986	21.013	58.584	1.000	19.22
ANISOU 608	CZ	PHE	77	2378	2542	2382	98	13 -364
ATOM 609	C	PHE	77	-9.668	19.976	53.924	1.000	13.73
ANISOU 609	C	PHE	77	1306	2096	1813	-368	21 -204
ATOM 610	O	PHE	77	-10.520	19.313	53.291	1.000	16.02
ANISOU 610	O	PHE	77	1386	2508	2194	-470	-128 -425

ATOM	611	N	THR	78	-8.869	19.439	54.852	1.000	14.33		
ANISOU	611	N	THR	78	1543	2270	1629	-472	35	-49	
ATOM	612	CA	THR	78	-9.034	18.053	55.276	1.000	15.80		
ANISOU	612	CA	THR	78	1813	2310	1880	-508	-23	8	2
ATOM	613	CB	THR	78	-8.001	17.081	54.666	1.000	18.26		
ANISOU	613	CB	THR	78	1583	2199	3158	-599	334	131	
ATOM	614	OG1	THR	78	-7.924	17.323	53.266	1.000	21.81		
ANISOU	614	OG1	THR	78	3351	1877	3057	-88	943	-370	
ATOM	615	CG2	THR	78	-8.419	15.634	54.888	1.000	20.35		
ANISOU	615	CG2	THR	78	2855	2254	2622	-1119	1108	-707	
ATOM	616	C	THR	78	-8.832	17.881	56.777	1.000	19.14		
ANISOU	616	C	THR	78	2845	2479	1948	-1747	-471	169	
ATOM	617	O	THR	78	-7.801	18.311	57.290	1.000	22.04		
ANISOU	617	O	THR	78	2781	2889	2704	-1718	-985	763	
ATOM	618	N	GLY	79	-9.730	17.203	57.484	1.000	19.20		
ANISOU	618	N	GLY	79	2629	2823	1844	-1352	19	4	5
ATOM	619	CA	GLY	79	-9.429	16.695	58.819	1.000	16.69		
ANISOU	619	CA	GLY	79	1800	2770	1771	-518	196	-95	
ATOM	620	C	GLY	79	-8.672	15.376	58.720	1.000	22.98		
ANISOU	620	C	GLY	79	2381	2874	3477	-272	-289	-545	
ATOM	621	O	GLY	79	-9.227	14.504	58.044	1.000	25.57		
ANISOU	621	O	GLY	79	3683	2520	3514	-456	-974	-141	
ATOM	622	N	LEU	80	-7.494	15.236	59.319	1.000	22.91		
ANISOU	622	N	LEU	80	2412	2900	3392	30	-206	-606	
ATOM	623	CA	LEU	80	-6.644	14.081	59.072	1.000	25.08		
ANISOU	623	CA	LEU	80	2848	2777	3904	206	621	361	
ATOM	624	C	LEU	80	-6.372	13.294	60.370	1.000	24.30		
ANISOU	624	C	LEU	80	2834	2762	3637	-300	480	200	
ATOM	625	O	LEU	80	-5.729	13.812	61.291	1.000	25.14		
ANISOU	625	O	LEU	80	2253	3017	4283	27	145	-5	
ATOM	626	CB	LEU	80	-5.318	14.480	58.415	1.000	27.16		
ANISOU	626	CB	LEU	80	3057	3326	3937	379	918	641	
ATOM	627	CG	LEU	80	-4.411	13.338	57.933	1.000	29.43		
ANISOU	627	CG	LEU	80	3474	3505	4204	287	1260	173	
ATOM	628	CD1	LEU	80	-5.145	12.438	56.956	1.000	38.31		
ANISOU	628	CD1	LEU	80	5673	3891	4993	-1554	1987	-287	
ATOM	629	CD2	LEU	80	-3.137	13.884	57.306	1.000	29.85		
ANISOU	629	CD2	LEU	80	3502	3919	3920	125	1307	-264	
ATOM	630	N	GLU	81	-6.853	12.055	60.396	1.000	25.58		
ANISOU	630	N	GLU	81	2469	2759	4490	-196	-82	510	
ATOM	631	CA	GLU	81	-6.739	11.038	61.415	1.000	25.98		
ANISOU	631	CA	GLU	81	2739	2692	4441	-258	-55	424	
ATOM	632	C	GLU	81	-5.299	10.536	61.562	1.000	26.28		
ANISOU	632	C	GLU	81	2870	3268	3848	187	407	841	
ATOM	633	O	GLU	81	-4.489	10.655	60.655	1.000	28.19		
ANISOU	633	O	GLU	81	3709	3520	3483	253	799	-544	
ATOM	634	CB	GLU	81	-7.685	9.861	61.123	1.000	29.83		
ANISOU	634	CB	GLU	81	3533	2894	4906	-770	270	181	
ATOM	635	CG	GLU	81	-7.241	8.832	60.098	1.000	25.34		
ANISOU	635	CG	GLU	81	1737	2915	4976	284	-1220	158	
ATOM	636	CD	GLU	81	-7.568	9.156	58.649	1.000	27.00		
ANISOU	636	CD	GLU	81	1841	3405	5012	475	-1887	-456	
ATOM	637	OE1	GLU	81	-8.120	10.240	58.324	1.000	28.81		
ANISOU	637	OE1	GLU	81	3444	3091	4413	322	-155	791	
ATOM	638	OE2	GLU	81	-7.240	8.273	57.814	1.000	31.31		
ANISOU	638	OE2	GLU	81	3514	3384	4999	162	352	100	
ATOM	639	N	SER	82	-4.988	9.974	62.720	1.000	31.00		
ANISOU	639	N	SER	82	3568	3780	4430	-65	-30	1484	
ATOM	640	CA	SER	82	-3.653	9.422	62.959	1.000	30.29		
ANISOU	640	CA	SER	82	3692	3278	4540	-157	-515	1011	
ATOM	641	C	SER	82	-3.421	8.150	62.150	1.000	31.76		

ANISOU	641	C	SER	82	3995	3241	4831	-102	-1104 847
ATOM	642	O	SER	82	-4.313	7.728	61.397	1.000	34.01
ANISOU	642	O	SER	82	3193	3794	5935	458	-1188 134
ATOM	643	CB	SER	82	-3.463	9.167	64.452	1.000	34.74
ANISOU	643	CB	SER	82	4687	3907	4606	-232	-979 971
ATOM	644	OG	SER	82	-2.360	8.305	64.681	1.000	41.53
ANISOU	644	OG	SER	82	4922	5366	5490	236	-1958 970
ATOM	645	N	GLY	91	-17.230	9.498	70.136	1.000	42.64
ANISOU	645	N	GLY	91	4516	7599	4086	-2166	2340 -427
ATOM	646	CA	GLY	91	-17.485	10.892	69.789	1.000	44.91
ANISOU	646	CA	GLY	91	6666	7702	2697	-4311	-1561 565
ATOM	647	C	GLY	91	-16.227	11.662	69.452	1.000	38.67
ANISOU	647	C	GLY	91	5455	7587	1652	-2821	-274 -159
ATOM	648	O	GLY	91	-15.164	11.480	70.040	1.000	32.45
ANISOU	648	O	GLY	91	4241	4474	3616	-183	1152 -439
ATOM	649	N	GLY	92	-16.332	12.558	68.474	1.000	31.97
ANISOU	649	N	GLY	92	3881	5904	2363	-1382	735 -571
ATOM	650	CA	GLY	92	-15.232	13.412	68.075	1.000	33.02
ANISOU	650	CA	GLY	92	4121	6150	2274	-1716	851 -956
ATOM	651	C	GLY	92	-15.223	13.696	66.572	1.000	26.22
ANISOU	651	C	GLY	92	2603	5046	2314	-885	741 -947
ATOM	652	O	GLY	92	-16.289	13.666	65.939	1.000	23.91
ANISOU	652	O	GLY	92	2490	3396	3198	-680	548 -567
ATOM	653	N	SER	93	-14.010	13.956	66.088	1.000	23.77
ANISOU	653	N	SER	93	2405	3917	2708	-372	736 -560
ATOM	654	CA	SER	93	-13.801	14.287	64.690	1.000	23.41
ANISOU	654	CA	SER	93	2700	3292	2901	-386	970 -399
ATOM	655	C	SER	93	-12.410	13.852	64.240	1.000	24.26
ANISOU	655	C	SER	93	2547	3908	2763	-286	833 -224
ATOM	656	O	SER	93	-11.497	13.831	65.089	1.000	27.06
ANISOU	656	O	SER	93	3401	3536	3346	630	92 -386
ATOM	657	CB	SER	93	-13.966	15.795	64.467	1.000	25.71
ANISOU	657	CB	SER	93	2811	3225	3735	-576	271 -506
ATOM	658	OG	SER	93	-13.558	16.158	63.150	1.000	28.14
ANISOU	658	OG	SER	93	2694	3713	4284	-373	290 517
ATOM	659	N	TYR	94	-12.254	13.533	62.949	1.000	24.24
ANISOU	659	N	TYR	94	2786	3320	3104	-204	791 -817
ATOM	660	CA	TYR	94	-10.878	13.262	62.498	1.000	23.94
ANISOU	660	CA	TYR	94	3089	2502	3505	95	1112 -683
ATOM	661	C	TYR	94	-10.017	14.531	62.584	1.000	25.19
ANISOU	661	C	TYR	94	2601	2657	4312	147	737 -625
ATOM	662	O	TYR	94	-8.786	14.421	62.694	1.000	30.11
ANISOU	662	O	TYR	94	2617	3095	5726	307	760 36
ATOM	663	CB	TYR	94	-10.800	12.659	61.098	1.000	25.64
ANISOU	663	CB	TYR	94	3566	2910	3267	-293	1331 -525
ATOM	664	CG	TYR	94	-11.600	11.410	60.876	1.000	23.22
ANISOU	664	CG	TYR	94	3359	2768	2697	-69	784 -274
ATOM	665	CD1	TYR	94	-12.451	11.455	59.777	1.000	26.01
ANISOU	665	CD1	TYR	94	4410	2730	2741	499	353 -543
ATOM	666	CD2	TYR	94	-11.564	10.252	61.635	1.000	24.42
ANISOU	666	CD2	TYR	94	3117	2866	3297	73	458 -14
ATOM	667	CE1	TYR	94	-13.243	10.407	59.443	1.000	28.75
ANISOU	667	CE1	TYR	94	4559	3328	3037	434	140 -1370
ATOM	668	CE2	TYR	94	-12.375	9.159	61.305	1.000	26.47
ANISOU	668	CE2	TYR	94	4707	2585	2764	-220	1227 -718
ATOM	669	CZ	TYR	94	-13.209	9.247	60.212	1.000	29.70
ANISOU	669	CZ	TYR	94	5641	3518	2125	-1172	1103 -1447
ATOM	670	OH	TYR	94	-14.059	8.281	59.730	1.000	34.02
ANISOU	670	OH	TYR	94	3079	3962	5886	-423	1593 -2638
ATOM	671	N	SER	95	-10.628	15.714	62.561	1.000	22.61
ANISOU	671	N	SER	95	2460	2497	3632	-54	59 -338

ATOM	672	CA	SER	95	-9.924	16.975	62.750	1.000	22.54		
ANISOU	672	CA	SER	95	2257	2603	3706	-120	-301	4	6
ATOM	673	C	SER	95	-9.370	17.106	64.163	1.000	23.58		
ANISOU	673	C	SER	95	1811	3478	3671	-521	-88	-8	5
ATOM	674	O	SER	95	-8.623	18.034	64.481	1.000	26.53		
ANISOU	674	O	SER	95	2592	3242	4247	-469	-167	-6	41
ATOM	675	CB	SER	95	-10.838	18.177	62.478	1.000	27.58		
ANISOU	675	CB	SER	95	3657	2556	4264	365	-379	2	8
ATOM	676	OG	SER	95	-11.506	18.093	61.242	1.000	39.40		
ANISOU	676	OG	SER	95	6336	4214	4421	900	-1445	1	442
ATOM	677	N	ASP	96	-9.712	16.194	65.060	1.000	25.04		
ANISOU	677	N	ASP	96	2579	3688	3248	-399	277	-2	32
ATOM	678	CA	ASP	96	-9.228	16.317	66.422	1.000	24.42		
ANISOU	678	CA	ASP	96	2603	3347	3330	-470	257	-5	26
ATOM	679	C	ASP	96	-7.735	16.050	66.501	1.000	24.45		
ANISOU	679	C	ASP	96	2597	3228	3466	-471	162	-3	83
ATOM	680	O	ASP	96	-7.073	16.589	67.404	1.000	26.51		
ANISOU	680	O	ASP	96	2656	4047	3370	-170	160	-7	98
ATOM	681	CB	ASP	96	-9.952	15.334	67.334	1.000	24.97		
ANISOU	681	CB	ASP	96	2310	3806	3371	-423	-228	7	7
ATOM	682	CG	ASP	96	-11.411	15.605	67.606	1.000	26.77		
ANISOU	682	CG	ASP	96	2272	4334	3566	-362	-240	7	16
ATOM	683	OD1	ASP	96	-11.935	16.723	67.388	1.000	33.94		
ANISOU	683	OD1	ASP	96	3267	4894	4733	647	204	5	69
ATOM	684	OD2	ASP	96	-12.058	14.646	68.083	1.000	32.65		
ANISOU	684	OD2	ASP	96	3624	4709	4072	-1032	1446	-2	02
ATOM	685	N	TYR	97	-7.254	15.226	65.581	1.000	22.21		
ANISOU	685	N	TYR	97	2292	3389	2760	-376	-77	-1	02
ATOM	686	CA	TYR	97	-5.835	14.852	65.583	1.000	23.71		
ANISOU	686	CA	TYR	97	2480	3542	2987	-27	106	6	44
ATOM	687	C	TYR	97	-5.026	15.828	64.743	1.000	23.06		
ANISOU	687	C	TYR	97	2363	3754	2647	-410	-78	3	50
ATOM	688	O	TYR	97	-3.992	16.327	65.230	1.000	24.29		
ANISOU	688	O	TYR	97	2205	3845	3178	-133	-230	7	4
ATOM	689	CB	TYR	97	-5.585	13.451	65.035	1.000	28.38		
ANISOU	689	CB	TYR	97	3230	3324	4229	540	-450	8	32
ATOM	690	CG	TYR	97	-4.132	13.025	65.082	1.000	30.37		
ANISOU	690	CG	TYR	97	3278	4101	4161	766	-191	6	71
ATOM	691	CD1	TYR	97	-3.511	12.691	66.285	1.000	30.19		
ANISOU	691	CD1	TYR	97	2878	4475	4119	1106	151	9	51
ATOM	692	CD2	TYR	97	-3.370	12.945	63.922	1.000	29.79		
ANISOU	692	CD2	TYR	97	3317	4005	3997	53	-253	5	44
ATOM	693	CE1	TYR	97	-2.178	12.294	66.324	1.000	32.77		
ANISOU	693	CE1	TYR	97	2554	4771	5126	574	-68	7	63
ATOM	694	CE2	TYR	97	-2.043	12.553	63.955	1.000	32.68		
ANISOU	694	CE2	TYR	97	3536	3793	5087	403	353	3	23
ATOM	695	CZ	TYR	97	-1.445	12.228	65.157	1.000	33.00		
ANISOU	695	CZ	TYR	97	2633	4284	5622	1066	264	4	56
ATOM	696	OH	TYR	97	-0.121	11.845	65.156	1.000	42.66		
ANISOU	696	OH	TYR	97	2572	5373	8264	1161	764	1	277
ATOM	697	CB	SER	98	-3.465	16.575	62.134	1.000	23.20		
ANISOU	697	CB	SER	98	2461	2766	3587	105	2	-5	44
ATOM	698	OG	SER	98	-3.632	15.649	61.078	1.000	26.49		
ANISOU	698	OG	SER	98	3824	3059	3180	-154	238	-4	57
ATOM	699	C	SER	98	-5.694	17.744	61.701	1.000	18.66		
ANISOU	699	C	SER	98	2301	2150	2637	-295	66	1	3
ATOM	700	O	SER	98	-6.768	17.212	61.413	1.000	20.88		
ANISOU	700	O	SER	98	3042	2245	2646	-945	-249	1	81
ATOM	701	N	SER	98	-5.457	16.110	63.511	1.000	23.62		
ANISOU	701	N	SER	98	2816	3227	2931	-441	-395	6	05
ATOM	702	CA	SER	98	-4.748	17.143	62.741	1.000	21.31		

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ANISOU  702  CA  SER  98   2430    2687    2982    133   153   294
ATOM    703  N   MET  99   -5.307  18.891  61.148  1.000 18.68
ANISOU  703  N   MET  99   2392    2722    1984    -978  -366  101
ATOM    704  CA  MET  99   -6.047  19.560  60.075  1.000 17.84
ANISOU  704  CA  MET  99   2431    2620    1726    -945  -212  -17
ATOM    705  CB  MET  99   -6.819  20.779  60.585  1.000 19.71
ANISOU  705  CB  MET  99   2348    2968    2173    -679   256   4
ATOM    706  CG  MET  99   -8.052  20.392  61.374  1.000 23.68
ANISOU  706  CG  MET  99   2360    3055    3582    -504   393   489
ATOM    707  SD  MET  99   -9.031  21.821  61.911  1.000 22.33
ANISOU  707  SD  MET  99   2569    3383    2534    -522   170  -120
ATOM    708  CE  MET  99   -8.148  22.225  63.419  1.000 36.98
ANISOU  708  CE  MET  99   6485    4165    3401    -225 -1904  -23
ATOM    709  C   MET  99   -5.070  19.954  58.973  1.000 17.19
ANISOU  709  C   MET  99   2269    2488    1776    -960  -194  -201
ATOM    710  O   MET  99   -3.964  20.341  59.324  1.000 16.93
ANISOU  710  O   MET  99   1932    2583    1919    -367  -208  -241
ATOM    711  N   CYS  100  -5.486  19.864  57.715  1.000 20.00
ANISOU  711  N   CYS  100  3178    2683    1739   -1753 -358  166
ATOM    712  CA  CYS  100  -4.645  20.181  56.554  1.000 16.64
ANISOU  712  CA  CYS  100  2213    2294    1817    -924  -563  468
ATOM    713  CB  CYS  100  -4.291  18.893  55.813  1.000 17.74
ANISOU  713  CB  CYS  100  2161    2174    2407    560   -765 1053
ATOM    714  SG  CYS  100  -3.035  18.928  54.552  1.000 33.56
ANISOU  714  SG  CYS  100  5244    3511    3997    414   1509  601
ATOM    715  C   CYS  100  -5.347  21.121  55.590  1.000 13.48
ANISOU  715  C   CYS  100  1879    1415    1829    -68   240   -91
ATOM    716  O   CYS  100  -6.585  21.127  55.496  1.000 14.49
ANISOU  716  O   CYS  100  1880    1952    1673    -497   -57   14
ATOM    717  N   TYR  101  -4.589  21.921  54.852  1.000 13.35
ANISOU  717  N   TYR  101  1721    1677    1673    -254   -78   49
ATOM    718  CA  TYR  101  -5.016  22.753  53.755  1.000 10.27
ANISOU  718  CA  TYR  101  926  1498    1477    -15   -141  -231
ATOM    719  CB  TYR  101  -5.102  24.265  54.124  1.000 13.60
ANISOU  719  CB  TYR  101  1626    1513    2027    -48   322  -236
ATOM    720  CG  TYR  101  -5.498  25.025  52.863  1.000 17.31
ANISOU  720  CG  TYR  101  2373    1509    2694    -158  -103  193
ATOM    721  CD1 TYR  101  -6.815  25.068  52.519  1.000 16.38
ANISOU  721  CD1 TYR  101  2464    752   3006    190   -227   55
ATOM    722  CE1 TYR  101  -7.307  25.715  51.412  1.000 17.01
ANISOU  722  CE1 TYR  101  2755    714   2993    -86   -416  122
ATOM    723  CD2 TYR  101  -4.616  25.679  52.012  1.000 19.51
ANISOU  723  CD2 TYR  101  3032    1533    2847   -1143 -594  475
ATOM    724  CE2 TYR  101  -5.065  26.321  50.872  1.000 20.96
ANISOU  724  CE2 TYR  101  2802    1949    3211    238   112   769
ATOM    725  CZ  TYR  101  -6.414  26.334  50.568  1.000 22.78
ANISOU  725  CZ  TYR  101  3238    2291    3126   -1228 -919  624
ATOM    726  OH  TYR  101  -6.875  26.986  49.442  1.000 23.10
ANISOU  726  OH  TYR  101  3141    3112    2522    -14   -129  429
ATOM    727  C   TYR  101  -4.041  22.518  52.596  1.000 11.25
ANISOU  727  C   TYR  101  1223    1398    1654    -323   103  -252
ATOM    728  O   TYR  101  -2.823  22.677  52.787  1.000 12.23
ANISOU  728  O   TYR  101  1114    1750    1784    -87   130   -20
ATOM    729  N   SER  102  -4.542  22.190  51.405  1.000 11.17
ANISOU  729  N   SER  102  1355    1279    1611    -220   145  -263
ATOM    730  CA  SER  102  -3.752  21.802  50.235  1.000 10.46
ANISOU  730  CA  SER  102  1144    1263    1568    62   -1  -125
ATOM    731  CB  SER  102  -4.027  20.343  49.908  1.000 13.46
ANISOU  731  CB  SER  102  1668    1212    2234    324   105  -301
ATOM    732  OG  SER  102  -3.723  19.487  51.025  1.000 16.42
ANISOU  732  OG  SER  102  2291    1313    2637    -122   -43   96
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ATOM    733  C   SER  102  -4.046  22.668  49.008  1.000 11.74
ANISOU  733  C   SER  102  1346    1500    1614    18  -39  -10
ATOM    734  O   SER  102  -5.148  23.148  48.784  1.000 12.84
ANISOU  734  O   SER  102  1480    1410    1988    90  -66  249
ATOM    735  N   MET  103  -3.004  22.871  48.187  1.000 12.33
ANISOU  735  N   MET  103  1554    1722    1409   -262  -10  -246
ATOM    736  CA  MET  103  -3.188  23.603  46.938  1.000 12.92
ANISOU  736  CA  MET  103  1663    1681    1565    22   47   -70
ATOM    737  CB  MET  103  -3.215  25.122  47.179  1.000 17.51
ANISOU  737  CB  MET  103  2439    1634    2579   -363  812   -44
ATOM    738  CG  MET  103  -1.929  25.808  47.549  1.000 20.07
ANISOU  738  CG  MET  103  2509    1470    3646   -538  688   376
ATOM    739  SD  MET  103  -2.136  27.614  47.689  1.000 18.10
ANISOU  739  SD  MET  103  2235    1665    2975    -3 -334   -352
ATOM    740  CE  MET  103  -2.365  28.068  45.991  1.000 18.09
ANISOU  740  CE  MET  103  2319    1457    3098   -187  -718  -214
ATOM    741  C   MET  103  -2.152  23.221  45.892  1.000 12.57
ANISOU  741  C   MET  103  1420    1837    1519    119   -53  238
ATOM    742  O   MET  103  -1.120  22.573  46.175  1.000 12.57
ANISOU  742  O   MET  103  1094    1891    1792   -155  -165  276
ATOM    743  N   GLY  104  -2.418  23.650  44.655  1.000 12.83
ANISOU  743  N   GLY  104  1493    1958    1422    237   -124   -34
ATOM    744  CA  GLY  104  -1.533  23.459  43.513  1.000 12.65
ANISOU  744  CA  GLY  104  1075    2188    1544    -93   -37   242
ATOM    745  C   GLY  104  -1.624  24.622  42.542  1.000 14.36
ANISOU  745  C   GLY  104  1909    1985    1561   -265  -294  142
ATOM    746  O   GLY  104  -2.033  25.700  42.967  1.000 15.69
ANISOU  746  O   GLY  104  1628    2273    2060    163   -197  213
ATOM    747  N   THR  105  -1.242  24.397  41.276  1.000 14.52
ANISOU  747  N   THR  105  1829    2182    1504    -59   -375  319
ATOM    748  CA  THR  105  -1.218  25.452  40.279  1.000 15.27
ANISOU  748  CA  THR  105  1977    2223    1603   -105  -363  365
ATOM    749  CB  THR  105  -0.359  25.083  39.039  1.000 15.61
ANISOU  749  CB  THR  105  1936    2122    1873    -37   -106  554
ATOM    750  OG1 THR  105  -0.884  23.876  38.446  1.000 16.16
ANISOU  750  OG1 THR  105  1738    2260    2140    217   -285  151
ATOM    751  CG2 THR  105   1.092  24.882  39.369  1.000 17.47
ANISOU  751  CG2 THR  105  1918    2871    1847   -293  -227  527
ATOM    752  C   THR  105  -2.603  25.828  39.755  1.000 14.73
ANISOU  752  C   THR  105  1989    1694    1913    122   -340  199
ATOM    753  O   THR  105  -2.730  26.921  39.174  1.000 19.91
ANISOU  753  O   THR  105  2579    2355    2632    23  -437   1004
ATOM    754  N   ALA  106  -3.587  24.960  39.913  1.000 16.57
ANISOU  754  N   ALA  106  1836    2413    2047      2  -260   661
ATOM    755  CA  ALA  106  -4.975  25.167  39.465  1.000 14.94
ANISOU  755  CA  ALA  106  1975    1904    1798    105  -456  365
ATOM    756  CB  ALA  106  -5.054  24.945  37.965  1.000 17.75
ANISOU  756  CB  ALA  106  2006    2862    1876    140  -201   -32
ATOM    757  C   ALA  106  -5.942  24.251  40.222  1.000 16.26
ANISOU  757  C   ALA  106  1710    2174    2293    327  -127  491
ATOM    758  O   ALA  106  -5.498  23.398  41.013  1.000 14.57
ANISOU  758  O   ALA  106  1622    1971    1945    213   -21   337
ATOM    759  N   ASP  107  -7.253  24.410  40.008  1.000 16.71
ANISOU  759  N   ASP  107  1768    2096    2485    540   -22   304
ATOM    760  CA  ASP  107  -8.310  23.638  40.633  1.000 16.10
ANISOU  760  CA  ASP  107  1696    2175    2246     51  -485   -14
ATOM    761  CB  ASP  107  -8.231  22.171  40.211  1.000 17.09
ANISOU  761  CB  ASP  107  1299    2385    2808    144  -203  -399
ATOM    762  CG  ASP  107  -8.418  21.966  38.720  1.000 21.54
ANISOU  762  CG  ASP  107  2385    2894    2906     84  -317   -722
ATOM    763  OD1 ASP  107  -9.452  22.445  38.189  1.000 23.92
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ANISOU	763	OD1	ASP	107	3447	2970	2672	698	-753 -772
ATOM	764	OD2	ASP	107	-7.563	21.311	38.080	1.000	24.88
ANISOU	764	OD2	ASP	107	2496	4004	2954	105	244 -679
ATOM	765	C	ASP	107	-8.285	23.785	42.160	1.000	14.16
ANISOU	765	C	ASP	107	1261	1918	2201	237	-447 153
ATOM	766	O	ASP	107	-8.507	22.850	42.936	1.000	16.67
ANISOU	766	O	ASP	107	2017	1927	2390	-189	-193 9 7
ATOM	767	N	ASN	108	-8.027	25.020	42.598	1.000	15.34
ANISOU	767	N	ASN	108	2093	1866	1870	82	51 239
ATOM	768	CA	ASN	108	-7.967	25.314	44.031	1.000	13.68
ANISOU	768	CA	ASN	108	1479	1823	1898	153	107 257
ATOM	769	CB	ASN	108	-6.925	26.420	44.272	1.000	15.60
ANISOU	769	CB	ASN	108	1593	2026	2309	16	267 -98
ATOM	770	CG	ASN	108	-5.516	25.942	43.963	1.000	15.23
ANISOU	770	CG	ASN	108	1505	2141	2142	5	-53 2
ATOM	771	OD1	ASN	108	-5.086	24.932	44.505	1.000	15.40
ANISOU	771	OD1	ASN	108	1412	2442	1998	-5	-239 188
ATOM	772	ND2	ASN	108	-4.823	26.678	43.094	1.000	16.96
ANISOU	772	ND2	ASN	108	1593	2198	2652	339	393 222
ATOM	773	C	ASN	108	-9.310	25.708	44.642	1.000	14.55
ANISOU	773	C	ASN	108	1471	1937	2120	261	191 526
ATOM	774	O	ASN	108	-10.222	26.170	43.958	1.000	16.89
ANISOU	774	O	ASN	108	1861	2336	2219	716	-109 1 4
ATOM	775	N	LEU	109	-9.412	25.512	45.954	1.000	13.42
ANISOU	775	N	LEU	109	1458	1648	1994	179	130 9
ATOM	776	CA	LEU	109	-10.602	25.796	46.769	1.000	13.53
ANISOU	776	CA	LEU	109	1094	2122	1923	-52	-86 -256
ATOM	777	CB	LEU	109	-11.187	24.499	47.331	1.000	14.50
ANISOU	777	CB	LEU	109	1382	1959	2169	119	455 -468
ATOM	778	CG	LEU	109	-11.580	23.383	46.370	1.000	15.21
ANISOU	778	CG	LEU	109	1593	1785	2403	235	63 -342
ATOM	779	CD1	LEU	109	-11.931	22.083	47.089	1.000	18.26
ANISOU	779	CD1	LEU	109	2460	1674	2806	382	-414 -94
ATOM	780	CD2	LEU	109	-12.780	23.783	45.529	1.000	22.36
ANISOU	780	CD2	LEU	109	3055	2391	3052	44	-1155 288
ATOM	781	C	LEU	109	-10.203	26.794	47.840	1.000	13.54
ANISOU	781	C	LEU	109	1179	1989	1979	76	-116 -259
ATOM	782	O	LEU	109	-9.416	26.428	48.717	1.000	16.15
ANISOU	782	O	LEU	109	2196	2210	1730	-52	-366 3 2
ATOM	783	N	PHE	110	-10.706	28.025	47.786	1.000	16.11
ANISOU	783	N	PHE	110	1369	2042	2709	105	-118 -288
ATOM	784	CA	PHE	110	-10.298	29.079	48.732	1.000	17.05
ANISOU	784	CA	PHE	110	1626	1801	3050	-116	259 -362
ATOM	785	CB	PHE	110	-9.660	30.259	47.991	1.000	17.94
ANISOU	785	CB	PHE	110	1423	2366	3027	-290	228 -129
ATOM	786	CG	PHE	110	-8.425	29.972	47.165	1.000	20.32
ANISOU	786	CG	PHE	110	1702	2650	3368	-176	459 -385
ATOM	787	CD1	PHE	110	-7.257	29.598	47.793	1.000	20.35
ANISOU	787	CD1	PHE	110	1885	2462	3387	461	573 -707
ATOM	788	CD2	PHE	110	-8.405	30.110	45.789	1.000	20.31
ANISOU	788	CD2	PHE	110	2073	2226	3419	512	712 -264
ATOM	789	CE1	PHE	110	-6.102	29.347	47.065	1.000	19.49
ANISOU	789	CE1	PHE	110	1958	2116	3332	176	749 -631
ATOM	790	CE2	PHE	110	-7.288	29.846	45.050	1.000	20.65
ANISOU	790	CE2	PHE	110	2158	2094	3596	758	724 -321
ATOM	791	CZ	PHE	110	-6.118	29.496	45.694	1.000	19.43
ANISOU	791	CZ	PHE	110	1925	2131	3327	219	542 -780
ATOM	792	C	PHE	110	-11.495	29.556	49.538	1.000	17.08
ANISOU	792	C	PHE	110	1774	1806	2911	-74	414 -111
ATOM	793	O	PHE	110	-12.562	29.792	48.929	1.000	21.26
ANISOU	793	O	PHE	110	1849	2577	3650	405	178 -448

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ATOM   794  N   PRO  111 -11.406  29.717  50.851  1.000 19.41
ANISOU 794  N   PRO  111  2279    2110    2985    -386   519   -314
ATOM   795  CD  PRO  111 -10.278  29.322  51.705  1.000 19.20
ANISOU 795  CD  PRO  111  2773    1880    2640    -417   255   -514
ATOM   796  CA  PRO  111 -12.549  30.252  51.604  1.000 21.47
ANISOU 796  CA  PRO  111  3026    1924    3206     -50   728   -635
ATOM   797  CB  PRO  111 -12.167  30.007  53.055  1.000 23.63
ANISOU 797  CB  PRO  111  3789    2054    3137     334   776   -575
ATOM   798  CG  PRO  111 -10.775  29.535  53.100  1.000 22.33
ANISOU 798  CG  PRO  111  2767    2908    2809   -1006   623   -414
ATOM   799  C   PRO  111 -12.828  31.739  51.433  1.000 23.88
ANISOU 799  C   PRO  111  3139    2049    3887      79  -142   -479
ATOM   800  O   PRO  111 -13.919  32.194  51.834  1.000 26.77
ANISOU 800  O   PRO  111  3800    2818    3555     992   -91   -397
ATOM   801  N   SER  112 -11.906  32.517  50.872  1.000 25.19
ANISOU 801  N   SER  112  3514    2269    3788    -247  -856  282
ATOM   802  CA  SER  112 -12.300  33.919  50.631  1.000 26.43
ANISOU 802  CA  SER  112  2654    2655    4734     496  1364  456
ATOM   803  CB  SER  112 -12.506  34.712  51.912  1.000 33.37
ANISOU 803  CB  SER  112  3122    3663    5895     172  2582  -510
ATOM   804  OG  SER  112 -11.322  34.719  52.688  1.000 36.94
ANISOU 804  OG  SER  112  6530    2154    5351    1399   206   -415
ATOM   805  C   SER  112 -11.262  34.587  49.723  1.000 26.62
ANISOU 805  C   SER  112  2613    2546    4956    1021  1668  651
ATOM   806  O   SER  112 -10.219  34.029  49.414  1.000 22.81
ANISOU 806  O   SER  112  2241    2782    3645     800   837   -400
ATOM   807  N   GLY  113 -11.570  35.802  49.279  1.000 28.93
ANISOU 807  N   GLY  113  2937    2947    5108    1008  1175  1198
ATOM   808  CA  GLY  113 -10.659  36.478  48.365  1.000 30.79
ANISOU 808  CA  GLY  113  2992    3606    5102     381   798  1400
ATOM   809  C   GLY  113  -9.362  36.829  49.070  1.000 31.83
ANISOU 809  C   GLY  113  3297    3919    4878     262   897  528
ATOM   810  O   GLY  113  -8.294  36.790  48.459  1.000 25.85
ANISOU 810  O   GLY  113  2920    2317    4585     857   450   -203
ATOM   811  N   ASP  114  -9.479  37.145  50.365  1.000 29.56
ANISOU 811  N   ASP  114  3487    2877    4868     866  1104  760
ATOM   812  CA  ASP  114  -8.257  37.463  51.122  1.000 26.15
ANISOU 812  CA  ASP  114  3189    2680    4066    1028  1584  542
ATOM   813  CB  ASP  114  -8.628  37.937  52.526  1.000 33.81
ANISOU 813  CB  ASP  114  5580    2697    4569    1774  1691  -240
ATOM   814  CG  ASP  114  -7.904  39.232  52.840  1.000 40.77
ANISOU 814  CG  ASP  114  6798    3734    4960     719   693   -248
ATOM   815  OD1 ASP  114  -8.330  40.277  52.295  1.000 48.61
ANISOU 815  OD1 ASP  114  6014    2534    9920    1703   931   -913
ATOM   816  OD2 ASP  114  -6.932  39.178  53.622  1.000 54.35
ANISOU 816  OD2 ASP  114  5258    7609    7783    -868   495  1602
ATOM   817  C   ASP  114  -7.310  36.281  51.231  1.000 23.05
ANISOU 817  C   ASP  114  2621    2102    4033     444  1874  340
ATOM   818  O   ASP  114  -6.111  36.371  50.955  1.000 22.05
ANISOU 818  O   ASP  114  2423    2277    3677     131  1411  -461
ATOM   819  N   PHE  115  -7.854  35.160  51.637  1.000 23.21
ANISOU 819  N   PHE  115  2945    1890    3984    -130  1293  -228
ATOM   820  CA  PHE  115  -7.120  33.896  51.690  1.000 19.93
ANISOU 820  CA  PHE  115  2562    1908    3102    -198   655   -294
ATOM   821  CB  PHE  115  -8.085  32.792  52.157  1.000 19.49
ANISOU 821  CB  PHE  115  2378    1754    3275      64   881  -314
ATOM   822  CG  PHE  115  -7.523  31.445  52.540  1.000 17.25
ANISOU 822  CG  PHE  115  2053    1589    2912     -56   348   -695
ATOM   823  CD1 PHE  115  -7.637  30.951  53.833  1.000 19.00
ANISOU 823  CD1 PHE  115  2728    1539    2950     73   496   -683
ATOM   824  CD2 PHE  115  -6.868  30.634  51.615  1.000 17.88
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ANISOU  824  CD2 PHE  115     1933     1931     2927        7    298    -810
ATOM    825  CE1 PHE  115   -7.100   29.711   54.163    1.000  20.25
ANISOU  825  CE1 PHE  115     2825     1825     3042      317    341    -575
ATOM    826  CE2 PHE  115   -6.338   29.412   51.955    1.000  19.11
ANISOU  826  CE2 PHE  115     1865     2158     3237      336    351    -885
ATOM    827  CZ  PHE  115   -6.452   28.936   53.233    1.000  19.39
ANISOU  827  CZ  PHE  115     2068     1910     3390      320    248    -669
ATOM    828  C   PHE  115   -6.506   33.624   50.327    1.000  17.86
ANISOU  828  C   PHE  115     1964     1945     2878       61    344      1      6
ATOM    829  O   PHE  115   -5.324   33.315   50.271    1.000  17.34
ANISOU  829  O   PHE  115     1868     2107     2613     -132    179      15      7
ATOM    830  N   GLU  116   -7.310   33.683   49.263    1.000  18.21
ANISOU  830  N   GLU  116     1921     1934     3065      547    281      6      2
ATOM    831  CA  GLU  116   -6.848   33.387   47.907    1.000  19.99
ANISOU  831  CA  GLU  116     2128     2618     2851       81    231      2      2
ATOM    832  CB  GLU  116   -7.968   33.605   46.884    1.000  18.61
ANISOU  832  CB  GLU  116     2058     1952     3060      231    244      2      0
ATOM    833  CG  GLU  116   -7.398   33.378   45.482    1.000  18.61
ANISOU  833  CG  GLU  116     1813     2288     2971      295    -32     -3      3
ATOM    834  CD  GLU  116   -8.442   33.230   44.412    1.000  22.40
ANISOU  834  CD  GLU  116     1908     3193     3410     -122   -278     -9      1
ATOM    835  OE1 GLU  116   -9.654   33.272   44.678    1.000  30.82
ANISOU  835  OE1 GLU  116     1793     4465     5452      273   -414     -2      4
ATOM    836  OE2 GLU  116   -8.085   33.063   43.225    1.000  30.24
ANISOU  836  OE2 GLU  116     3333     5132     3026      382   -658      3      2      7
ATOM    837  C   GLU  116   -5.620   34.211   47.535    1.000  18.82
ANISOU  837  C   GLU  116     2090     2069     2990      294    119      4      8      7
ATOM    838  O   GLU  116   -4.605   33.701   47.049    1.000  17.41
ANISOU  838  O   GLU  116     2228     1780     2606       45    259      2      8      2
ATOM    839  N   ARG  117   -5.660   35.508   47.777    1.000  21.02
ANISOU  839  N   ARG  117     2313     2185     3487      408    220      9      0
ATOM    840  CA  ARG  117   -4.560   36.420   47.431    1.000  21.35
ANISOU  840  CA  ARG  117     2337     1800     3976      466    147     -3      1
ATOM    841  C   ARG  117   -3.291   36.054   48.192    1.000  20.52
ANISOU  841  C   ARG  117     2292     2124     3380      353    288     -1      0
ATOM    842  O   ARG  117   -2.186   35.969   47.636    1.000  18.96
ANISOU  842  O   ARG  117     2223     1664     3316      138    318      2      3      1
ATOM    843  CB  ARG  117   -4.971   37.885   47.693    1.000  25.59
ANISOU  843  CB  ARG  117     3237     1900     4587      929   1882      6      3      2
ATOM    844  CG  ARG  117   -3.881   38.908   47.478    1.000  32.57
ANISOU  844  CG  ARG  117     5212     1925     5237     -281   1083      6      2      3
ATOM    845  CD  ARG  117   -4.325   40.323   47.859    1.000  36.56
ANISOU  845  CD  ARG  117     6009     2157     5724      149   1774      6      6      3
ATOM    846  NE  ARG  117   -5.162   40.335   49.056    1.000  44.43
ANISOU  846  NE  ARG  117     7200     3742     5940      -96   2344     -1      5
ATOM    847  CZ  ARG  117   -4.763   40.501   50.306    1.000  45.48
ANISOU  847  CZ  ARG  117     6422     4804     6054     -370   2388     -2      8      3
ATOM    848  NH1 ARG  117   -3.484   40.683   50.619    1.000  53.21
ANISOU  848  NH1 ARG  117     6867     6451     6900    -2543   2487      3      5      4
ATOM    849  NH2 ARG  117   -5.647   40.487   51.301    1.000  50.00
ANISOU  849  NH2 ARG  117     6265     6511     6220      224   2433     -1      5      3      4
ATOM    850  N   ILE  118   -3.439   35.832   49.493    1.000  19.30
ANISOU  850  N   ILE  118     2275     1838     3221      128    407     -6      4      5
ATOM    851  CA  ILE  118   -2.275   35.527   50.331    1.000  18.25
ANISOU  851  CA  ILE  118     2376     1745     2811       78    530     -4      4      9
ATOM    852  CB  ILE  118   -2.665   35.597   51.820    1.000  18.24
ANISOU  852  CB  ILE  118     2201     1726     3003      346    906     -3      0      6
ATOM    853  CG2 ILE  118   -1.712   34.851   52.732    1.000  18.49
ANISOU  853  CG2 ILE  118     2077     2158     2792     -202    308     -5      3      0
ATOM    854  CG1 ILE  118   -2.877   37.031   52.368    1.000  24.69
ANISOU  854  CG1 ILE  118     4436     1808     3136      284   1382     -4      1      4
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ATOM    855  CD1 ILE   118      -3.786  37.025  53.582  1.000 29.63
ANISOU  855  CD1 ILE   118 6169  3096    1994     189   1258  -1068
ATOM    856  C   ILE   118      -1.692  34.172  49.959  1.000 15.65
ANISOU  856  C   ILE   118 2316  1549    2082     -89    573   -117
ATOM    857  O   ILE   118      -0.463  34.035  49.802  1.000 14.59
ANISOU  857  O   ILE   118 2240  1255    2051      16    286    214
ATOM    858  N   TRP   119      -2.523  33.139  49.784  1.000 14.44
ANISOU  858  N   TRP   119 2125  1592    1771      47    128    -71
ATOM    859  CA  TRP   119      -2.010  31.795  49.518  1.000 13.68
ANISOU  859  CA  TRP   119 1712  1529    1957     -61    220      4   0
ATOM    860  CB  TRP   119      -3.089  30.755  49.932  1.000 14.93
ANISOU  860  CB  TRP   119 1819  1729    2123    -234    295    -35
ATOM    861  CG  TRP   119      -2.864  30.482  51.420  1.000 16.19
ANISOU  861  CG  TRP   119 1640  2364    2146    -168    582    167
ATOM    862  CD2 TRP   119      -2.116  29.430  51.993  1.000 20.41
ANISOU  862  CD2 TRP   119 3189  2414    2151     202    523    405
ATOM    863  CE2 TRP   119      -2.177  29.580  53.392  1.000 19.84
ANISOU  863  CE2 TRP   119 3536  1818    2184    -439    234    137
ATOM    864  CE3 TRP   119      -1.390  28.357  51.456  1.000 23.94
ANISOU  864  CE3 TRP   119 5382  1647    2068     561    126    400
ATOM    865  CD1 TRP   119      -3.340  31.223  52.460  1.000 20.05
ANISOU  865  CD1 TRP   119 3207  2343    2069      -9    189   -139
ATOM    866  NE1 TRP   119      -2.938  30.689  53.649  1.000 20.32
ANISOU  866  NE1 TRP   119 2806  2726    2188     -96    -68   -185
ATOM    867  CZ2 TRP   119      -1.547  28.714  54.281  1.000 22.12
ANISOU  867  CZ2 TRP   119 4071  2256    2078     -17    105      2   2
ATOM    868  CZ3 TRP   119      -0.761  27.490  52.332  1.000 21.52
ANISOU  868  CZ3 TRP   119 4214  2168    1794     311   -193    197
ATOM    869  CH2 TRP   119      -0.847  27.674  53.715  1.000 24.34
ANISOU  869  CH2 TRP   119 5349  2047    1850     329    148    183
ATOM    870  C   TRP   119      -1.521  31.634  48.095  1.000 14.27
ANISOU  870  C   TRP   119 2180  1259    1985    -187    334    -65
ATOM    871  O   TRP   119      -0.569  30.865  47.855  1.000 14.73
ANISOU  871  O   TRP   119 1996  1653    1946     -67    362    101
ATOM    872  N   THR   120      -2.109  32.325  47.116  1.000 13.99
ANISOU  872  N   THR   120 2231  1237    1848     106    627   -137
ATOM    873  CA  THR   120      -1.541  32.275  45.762  1.000 15.19
ANISOU  873  CA  THR   120 1903  2093    1774       9    435    -242
ATOM    874  CB  THR   120      -2.492  32.983  44.787  1.000 16.41
ANISOU  874  CB  THR   120 1934  2304    1995    -331    152      6   6
ATOM    875  OG1 THR   120      -3.738  32.297  44.766  1.000 18.53
ANISOU  875  OG1 THR   120 1891  2288    2863    -236    195    407
ATOM    876  CG2 THR   120      -1.974  32.906  43.358  1.000 18.02
ANISOU  876  CG2 THR   120 2135  2602    2108     324    322    318
ATOM    877  C   THR   120      -0.145  32.870  45.727  1.000 14.19
ANISOU  877  C   THR   120 1868  2050    1475      87    285   -167
ATOM    878  O   THR   120       0.756  32.299  45.078  1.000 13.62
ANISOU  878  O   THR   120 1864  1692    1620     301    354    217
ATOM    879  N   GLN   121       0.114  33.962  46.429  1.000 14.55
ANISOU  879  N   GLN   121 1721  1672    2136     304    175    -67
ATOM    880  CA  GLN   121       1.459  34.548  46.483  1.000 15.80
ANISOU  880  CA  GLN   121 2067  1666    2271     -18   -119    362
ATOM    881  C   GLN   121       2.465  33.642  47.176  1.000 13.73
ANISOU  881  C   GLN   121 1747  1665    1806     -30     18    114
ATOM    882  O   GLN   121       3.603  33.452  46.685  1.000 15.36
ANISOU  882  O   GLN   121 2063  1688    2084      48    360    -44
ATOM    883  CB  GLN   121       1.315  35.918  47.154  1.000 18.85
ANISOU  883  CB  GLN   121 2537  1426    3200     -73     -5    356
ATOM    884  CG  GLN   121       2.639  36.558  47.543  1.000 18.88
ANISOU  884  CG  GLN   121 2507  1788    2878      59      9    -248
ATOM    885  CD  GLN   121       3.468  36.936  46.337  1.000 20.70
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ANISOU  885  CD  GLN  121  2584    2138    3142    -373   -85   231
ATOM    886  OE1 GLN  121    2.935  37.088  45.224   1.000 22.47
ANISOU  886  OE1 GLN  121  2695    2822    3019    -245     0   121
ATOM    887  NE2 GLN  121    4.779  37.101  46.522   1.000 25.22
ANISOU  887  NE2 GLN  121  2426    3344    3811     127   -131  1385
ATOM    888  N   TYR  122    2.081  33.054  48.299   1.000 12.26
ANISOU  888  N   TYR  122  1747    1514    1399      99    -55  -258
ATOM    889  CA  TYR  122    2.896  32.102  49.050   1.000 13.18
ANISOU  889  CA  TYR  122  1901    1643    1464     -20   -253  -160
ATOM    890  CB  TYR  122    2.211  31.724  50.364   1.000 13.78
ANISOU  890  CB  TYR  122  2045    1435    1756     116     48   -28
ATOM    891  CG  TYR  122    2.994  30.808  51.282   1.000 14.22
ANISOU  891  CG  TYR  122  1966    1681    1758     101     68   101
ATOM    892  CD1 TYR  122    4.271  31.120  51.722   1.000 17.48
ANISOU  892  CD1 TYR  122  1788    1972    2882     149     -5   420
ATOM    893  CE1 TYR  122    5.003  30.284  52.576   1.000 18.55
ANISOU  893  CE1 TYR  122  2131    2050    2868     102   -404   251
ATOM    894  CD2 TYR  122    2.445  29.619  51.731   1.000 20.72
ANISOU  894  CD2 TYR  122  3308    1366    3197    -519  -1524   323
ATOM    895  CE2 TYR  122    3.140  28.773  52.574   1.000 25.40
ANISOU  895  CE2 TYR  122  3772    1812    4067    -782  -2084   873
ATOM    896  CZ  TYR  122    4.413  29.101  52.992   1.000 20.93
ANISOU  896  CZ  TYR  122  2985    1742    3224     -96  -1145   313
ATOM    897  OH  TYR  122    5.068  28.230  53.826   1.000 29.87
ANISOU  897  OH  TYR  122  4830    1998    4522    -680  -3078   621
ATOM    898  C   TYR  122    3.218  30.876  48.209   1.000 12.33
ANISOU  898  C   TYR  122  1833    1412    1439      89   -218     8
ATOM    899  O   TYR  122    4.395  30.507  48.117   1.000 14.25
ANISOU  899  O   TYR  122  1896    1861    1656     339   -242   216
ATOM    900  N   PHE  123    2.224  30.269  47.573   1.000 11.28
ANISOU  900  N   PHE  123  1950    1297    1041       6   -151   185
ATOM    901  CA  PHE  123    2.482  29.151  46.665   1.000 12.08
ANISOU  901  CA  PHE  123  1731    1219    1640      64    -60     6
ATOM    902  CB  PHE  123    1.139  28.719  46.024   1.000 13.86
ANISOU  902  CB  PHE  123  2048    1550    1666    -104   -276   -82
ATOM    903  CG  PHE  123    1.311  27.516  45.099   1.000 14.44
ANISOU  903  CG  PHE  123  2173    1677    1637     142   -475   -94
ATOM    904  CD1 PHE  123    1.281  26.234  45.614   1.000 13.64
ANISOU  904  CD1 PHE  123  1857    1563    1764     -42   -702  -236
ATOM    905  CD2 PHE  123    1.511  27.664  43.729   1.000 13.81
ANISOU  905  CD2 PHE  123  1450    2164    1634    -420   -295  -248
ATOM    906  CE1 PHE  123    1.468  25.141  44.795   1.000 17.16
ANISOU  906  CE1 PHE  123  2282    1819    2418     130   -855  -644
ATOM    907  CE2 PHE  123    1.715  26.559  42.916   1.000 18.31
ANISOU  907  CE2 PHE  123  2098    2657    2201   -1053   172   -845
ATOM    908  CZ  PHE  123    1.706  25.295  43.445   1.000 16.71
ANISOU  908  CZ  PHE  123  1442    2382    2526     -36   -306  -1077
ATOM    909  C   PHE  123    3.489  29.511  45.581   1.000 13.48
ANISOU  909  C   PHE  123  2004    1472    1645     236    157     18
ATOM    910  O   PHE  123    4.424  28.768  45.242   1.000 13.07
ANISOU  910  O   PHE  123  1591    1498    1876      42    -78   -172
ATOM    911  N   ASP  124    3.294  30.684  44.948   1.000 13.83
ANISOU  911  N   ASP  124  1490    1575    2189     51    207   288
ATOM    912  CA  ASP  124    4.207  31.036  43.861   1.000 13.75
ANISOU  912  CA  ASP  124  1505    1330    2389    458     398   344
ATOM    913  CB  ASP  124    3.708  32.352  43.242   1.000 18.95
ANISOU  913  CB  ASP  124  2650    1970    2580    656     -63   926
ATOM    914  CG  ASP  124    4.470  32.708  41.989   1.000 27.54
ANISOU  914  CG  ASP  124  5327    2099    3036   -123     939   880
ATOM    915  OD1 ASP  124    4.541  31.904  41.023   1.000 37.04
ANISOU  915  OD1 ASP  124  6362    3225    4485    108    2616  -331
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ATOM    916  OD2 ASP  124 4.985   33.843  42.011  1.000 32.60
ANISOU  916  OD2 ASP  124 4724    3509    4151    -1539 234  851
ATOM    917  C   ASP  124 5.645   31.164  44.328  1.000 14.49
ANISOU  917  C   ASP  124 1493    1721    2293    327   485  482
ATOM    918  O   ASP  124 6.591   30.721  43.674  1.000 14.52
ANISOU  918  O   ASP  124 1477    1363    2679    289   497  307
ATOM    919  N   ARG  125 5.866   31.777  45.499  1.000 14.03
ANISOU  919  N   ARG  125 1501    1271    2558    353   398  414
ATOM    920  CA  ARG  125 7.214   31.863  46.044  1.000 16.40
ANISOU  920  CA  ARG  125 1642    1625    2963    194   178  226
ATOM    921  C   ARG  125 7.828   30.494  46.346  1.000 14.69
ANISOU  921  C   ARG  125 1396    1688    2496    232   -25  153
ATOM    922  O   ARG  125 8.999   30.245  46.034  1.000 14.10
ANISOU  922  O   ARG  125 1279    1656    2424    7   -205  -201
ATOM    923  CB  ARG  125 7.213   32.705  47.318  1.000 18.13
ANISOU  923  CB  ARG  125 1950    1902    3035    787   -81  46
ATOM    924  CG  ARG  125 7.045   34.193  47.041  1.000 23.51
ANISOU  924  CG  ARG  125 2232    1780    4919    883   -36  -225
ATOM    925  CD  ARG  125 8.391   34.815  46.694  1.000 29.33
ANISOU  925  CD  ARG  125 3596    2824    4724    -667  237  -187
ATOM    926  NE  ARG  125 8.194   36.262  46.803  1.000 32.99
ANISOU  926  NE  ARG  125 4350    2766    5418    -678  -1642 156
ATOM    927  CZ  ARG  125 8.868   37.153  47.495  1.000 27.38
ANISOU  927  CZ  ARG  125 2292    2758    5353    -276  -580  -246
ATOM    928  NH1 ARG  125 9.916   36.821  48.235  1.000 38.55
ANISOU  928  NH1 ARG  125 4611    3604    6433    449   -2476  -669
ATOM    929  NH2 ARG  125 8.491   38.423  47.442  1.000 30.26
ANISOU  929  NH2 ARG  125 4062    2570    4865    -369  -835 363
ATOM    930  N   GLN  126 7.065   29.573  46.920  1.000 12.36
ANISOU  930  N   GLN  126 1316    1376    2002    248   -63  -264
ATOM    931  CA  GLN  126 7.524   28.201  47.153  1.000 13.39
ANISOU  931  CA  GLN  126 1765    1323    1999    219   -355  -377
ATOM    932  CB  AGLN 126 6.363   27.455  47.828  0.500 16.24
ANISOU  932  CB  AGLN 126 2422    1391    2357    188   202  -192
ATOM    933  CG  AGLN 126 6.149   27.758  49.284  0.500 18.83
ANISOU  933  CG  AGLN 126 2761    2021    2371    68 233  -210
ATOM    934  CD  AGLN 126 7.077   27.146  50.298  0.500 23.94
ANISOU  934  CD  AGLN 126 3578    2745    2774    -604  -757 3  3
ATOM    935  OE1 AGLN 126 7.181   27.683  51.419  0.500 35.94
ANISOU  935  OE1 AGLN 126 6788    3731    3136    -578  -1567  -478
ATOM    936  NE2 AGLN 126 7.774   26.055  50.008  0.500 24.63
ANISOU  936  NE2 AGLN 126 4491    1118    3751    -881  -2407 462
ATOM    937  CB  BGLN 126 6.525   27.417  48.018  0.500 13.36
ANISOU  937  CB  BGLN 126 1695    1137    2245    602   -114  -255
ATOM    938  CG  BGLN 126 6.604   27.750  49.497  0.500 18.28
ANISOU  938  CG  BGLN 126 2537    2257    2153    -68   -176  -105
ATOM    939  CD  BGLN 126 5.442   27.237  50.319  0.500 18.42
ANISOU  939  CD  BGLN 126 2227    2573    2198    344   -159 106
ATOM    940  OE1 BGLN 126 5.605   26.442  51.242  0.500 25.36
ANISOU  940  OE1 BGLN 126 3289    3517    2828    -100  -223 953
ATOM    941  NE2 BGLN 126 4.231   27.685  50.003  0.500 25.02
ANISOU  941  NE2 BGLN 126 2427    2669    4413    1004  -83  -298
ATOM    942  C   GLN  126 7.860   27.448  45.861  1.000 12.95
ANISOU  942  C   GLN  126 1506    1434    1979    307   -372  -366
ATOM    943  O   GLN  126 8.859   26.721  45.748  1.000 11.66
ANISOU  943  O   GLN  126 1461    1142    1827    182   -85  159
ATOM    944  N   TYR  127 6.960   27.578  44.868  1.000 11.61
ANISOU  944  N   TYR  127 1400    1276    1735    146   -168  -10
ATOM    945  CA  TYR  127 7.152   26.869  43.585  1.000 11.21
ANISOU  945  CA  TYR  127 1469    1242    1550    -92   -40  192
ATOM    946  CB  TYR  127 5.901   26.940  42.724  1.000 11.82
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ANISOU  946  CB  TYR  127  1346   1655   1491    -13    82  4  7
ATOM    947  CG  TYR  127  5.791  26.069 41.496  1.000 11.49
ANISOU  947  CG  TYR  127  1278   1428   1660    -4  -4  1  0
ATOM    948  CD1 TYR  127  6.550  24.928 41.270  1.000 11.28
ANISOU  948  CD1 TYR  127  1030   1334   1921    -87  -100  3  3
ATOM    949  CE1 TYR  127  6.406  24.153 40.115  1.000 11.47
ANISOU  949  CE1 TYR  127  1164   1167   2027    -51   -53  2  1
ATOM    950  CD2 TYR  127  4.871  26.410 40.500  1.000 11.98
ANISOU  950  CD2 TYR  127  1677   1093   1784    204   -219  -100
ATOM    951  CE2 TYR  127  4.715  25.655 39.357  1.000 11.37
ANISOU  951  CE2 TYR  127  1539   1118   1665    140   -68  -73
ATOM    952  CZ  TYR  127  5.494  24.508 39.163  1.000 11.02
ANISOU  952  CZ  TYR  127  1202   1226   1760    91  48  -125
ATOM    953  OH  TYR  127  5.379  23.720 38.030  1.000 11.57
ANISOU  953  OH  TYR  127  1547   1138   1712    94  177  -34
ATOM    954  C   TYR  127  8.386  27.392 42.882  1.000 10.83
ANISOU  954  C   TYR  127  1296   989  1830    230   -43  3  7  8
ATOM    955  O   TYR  127  9.185  26.605 42.375  1.000 10.86
ANISOU  955  O   TYR  127  1292   1232   1603    164   -237  -42
ATOM    956  N   THR  128  8.565  28.716 42.865  1.000 10.98
ANISOU  956  N   THR  128  1554   976  1642    212   -9  5  5  7
ATOM    957  CA  THR  128  9.766  29.305 42.295  1.000 11.80
ANISOU  957  CA  THR  128  1686   1125   1673    -47   -169  3  8  6
ATOM    958  CB  THR  128  9.605  30.849 42.378  1.000 12.66
ANISOU  958  CB  THR  128  1873   1074   1864    -52   -233  5  2  1
ATOM    959  OG1 THR  128  8.530  31.286 41.517  1.000 16.74
ANISOU  959  OG1 THR  128  2223   1597   2542    124   -457  9  9  8
ATOM    960  CG2 THR  128  10.878 31.510 41.893  1.000 16.54
ANISOU  960  CG2 THR  128  1871   778  3635    262   655  1  3  8
ATOM    961  C   THR  128  11.040 28.828 42.964  1.000 11.26
ANISOU  961  C   THR  128  1562   980  1738    -71   -162  1  4  8
ATOM    962  O   THR  128  11.995 28.458 42.258  1.000 12.16
ANISOU  962  O   THR  128  1769   1092   1758    17  26  2  7  9
ATOM    963  N   ALA  129  11.083 28.802 44.300  1.000 10.39
ANISOU  963  N   ALA  129  1183   1001   1763    70  -118  1  4  7
ATOM    964  CA  ALA  129  12.273 28.386 45.037  1.000 10.59
ANISOU  964  CA  ALA  129  1206   945  1873    -69   -170  2  8  1
ATOM    965  CB  ALA  129  12.113 28.603 46.536  1.000 12.46
ANISOU  965  CB  ALA  129  2113   851  1769    82  -218  5  7  7
ATOM    966  C   ALA  129  12.575 26.906 44.802  1.000 11.35
ANISOU  966  C   ALA  129  1258   883  2170    -16   -141  4  1  0
ATOM    967  O   ALA  129  13.738 26.485 44.641  1.000 10.93
ANISOU  967  O   ALA  129  1202   1157   1796    -36   -213  1  2  1
ATOM    968  N   SER  130  11.519 26.086 44.750  1.000 12.27
ANISOU  968  N   SER  130  1280   984  2398    -65   -1  -2  4
ATOM    969  CA  SER  130  11.682 24.650 44.512  1.000 10.89
ANISOU  969  CA  SER  130  1623   876  1638    -85   44  3  7  0
ATOM    970  CB  ASER 130  10.342 23.940 44.716  0.500 10.08
ANISOU  970  CB  ASER 130  1432   603  1793    213   247  4  1  3
ATOM    971  OG  ASER 130  9.771  24.063 46.006  0.500  9.12
ANISOU  971  OG  ASER 130  1021   651  1792    91  1  -14  3
ATOM    972  CB  BSER 130  10.364 23.919 44.765  0.500 10.60
ANISOU  972  CB  BSER 130  1687   822  1521    -45   318  1  5  8
ATOM    973  OG  BSER 130  9.418  24.098 43.734  0.500 16.22
ANISOU  973  OG  BSER 130  1717   1289   3156    137   -525  3  4  8
ATOM    974  C   SER  130  12.214 24.373 43.110  1.000 10.53
ANISOU  974  C   SER  130  1586   733  1684    -166   210  4  8  4
ATOM    975  O   SER  130  13.137 23.532 42.942  1.000 11.17
ANISOU  975  O   SER  130  1385   1012   1849    -151   -95  1  4  0
ATOM    976  N   ARG  131  11.680 25.044 42.079  1.000 10.46
ANISOU  976  N   ARG  131  1578   861  1534    -87   -66  9  9
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ATOM    977  CA  ARG  131  12.260  24.839  40.742  1.000 10.60
ANISOU  977  CA  ARG  131   1480    1110    1438     61   -288    8    2
ATOM    978  CB  ARG  131  11.426  25.553  39.679  1.000 12.99
ANISOU  978  CB  ARG  131   1893    1369    1673     63   -525    2    76
ATOM    979  CG  ARG  131  10.003  25.065  39.431  1.000 13.64
ANISOU  979  CG  ARG  131   1707    1735    1742    335   -559   -8    6
ATOM    980  CD  ARG  131   9.349  25.669  38.206  1.000 17.71
ANISOU  980  CD  ARG  131   2078    1973    2677     81   -983    7    01
ATOM    981  NE  ARG  131   9.453  27.113  38.015  1.000 19.76
ANISOU  981  NE  ARG  131   2716    2034    2757    -25   -525    7    13
ATOM    982  CZ  ARG  131   8.629  28.004  38.568  1.000 21.24
ANISOU  982  CZ  ARG  131   3688    1878    2503     -8   -128    6    47
ATOM    983  NH1 ARG  131   7.631  27.634  39.366  1.000 21.32
ANISOU  983  NH1 ARG  131   2792    3142    2166    -486   -667    5    7
ATOM    984  NH2 ARG  131   8.771  29.310  38.361  1.000 27.83
ANISOU  984  NH2 ARG  131   4649    1822    4103     -90   -422    5    61
ATOM    985  C   ARG  131  13.714  25.323  40.688  1.000 10.42
ANISOU  985  C   ARG  131   1542    1078    1339     50   -103    1
ATOM    986  O   ARG  131  14.568  24.683  40.080  1.000 10.94
ANISOU  986  O   ARG  131   1544    1105    1506    177    -134    4    2
ATOM    987  N   ALA  132  14.028  26.438  41.343  1.000 10.97
ANISOU  987  N   ALA  132   1477    1129    1563     74   -364   -4    5
ATOM    988  CA  ALA  132  15.379  26.983  41.343  1.000 11.10
ANISOU  988  CA  ALA  132   1539     944  1735      9   -102    9    7
ATOM    989  CB  ALA  132  15.429  28.344  42.048  1.000 12.82
ANISOU  989  CB  ALA  132   1711    1171    1987    -48   -248   -19    8
ATOM    990  C   ALA  132  16.393  26.045  41.995  1.000 11.55
ANISOU  990  C   ALA  132   1085    1107    2197    -197    305    7    45
ATOM    991  O   ALA  132  17.481  25.832  41.432  1.000 11.81
ANISOU  991  O   ALA  132   1081    1809    1599    -204    17    -9
ATOM    992  N   VAL  133  16.061  25.490  43.175  1.000 11.16
ANISOU  992  N   VAL  133   1260    1356    1623    -148    51    3    50
ATOM    993  CA  VAL  133  17.011  24.587  43.840  1.000 11.62
ANISOU  993  CA  VAL  133   1505    1529    1380     -69   -297    8    9
ATOM    994  CB  VAL  133  16.738  24.418  45.344  1.000 12.14
ANISOU  994  CB  VAL  133   1376    1674    1564     -74    -25    3    64
ATOM    995  CG1 VAL  133  15.550  23.501  45.608  1.000 14.96
ANISOU  995  CG1 VAL  133   1705    2316    1662    -706    8    -3    57
ATOM    996  CG2 VAL  133  17.981  23.864  46.033  1.000 15.63
ANISOU  996  CG2 VAL  133   1755    2340    1845    -341   -677    5    51
ATOM    997  C   VAL  133  17.079  23.268  43.065  1.000 11.71
ANISOU  997  C   VAL  133   1376    1363    1711     -24   -425    1    69
ATOM    998  O   VAL  133  18.198  22.733  42.925  1.000 11.55
ANISOU  998  O   VAL  133   1391    1453    1545     -4   -116    3    98
ATOM    999  N   ALA  134  15.982  22.758  42.480  1.000 12.87
ANISOU  999  N   ALA  134   1399    1517    1973     28   -334   -2    28
ATOM   1000  CA  ALA  134  16.084  21.557  41.621  1.000 10.57
ANISOU 1000  CA  ALA  134   1106    1220    1691    153   -298    9    6
ATOM   1001  CB  ALA  134  14.699  21.096  41.186  1.000 12.20
ANISOU 1001  CB  ALA  134   1254    1589    1794     35   -303   -1    27
ATOM   1002  C   ALA  134  16.968  21.797  40.399  1.000 12.58
ANISOU 1002  C   ALA  134   1393    1399    1987    272    -42    7    7
ATOM   1003  O   ALA  134  17.712  20.924  39.970  1.000 11.01
ANISOU 1003  O   ALA  134   1254    1358    1574     83   -268    2    6
ATOM   1004  N   ARG  135  16.908  22.995  39.809  1.000 12.03
ANISOU 1004  N   ARG  135   1517    1230    1824    -62   -327    8    7
ATOM   1005  CA  ARG  135  17.773  23.353  38.676  1.000 13.23
ANISOU 1005  CA  ARG  135   1854    1158    2015    -270   -209    16    1
ATOM   1006  CB  ARG  135  17.393  24.734  38.170  1.000 14.57
ANISOU 1006  CB  ARG  135   2203    1339    1994    -45   -541    22    2
ATOM   1007  CG  ARG  135  17.753  25.160  36.797  1.000 19.22
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ANISOU 1007 CG  ARG  135 4204    1120    1980    -490  -433 1 5 0
ATOM   1008 CD  ARG  135 17.237  26.563  36.471  1.000 22.14
ANISOU 1008 CD  ARG  135 4046    1500    2868    -159   315  8 2 2
ATOM   1009 NE  ARG  135 15.831  26.607  36.077  1.000 22.66
ANISOU 1009 NE  ARG  135 4239    1404    2965    -94    47 2 5 7
ATOM   1010 CZ  ARG  135 14.802  27.184  36.684  1.000 21.69
ANISOU 1010 CZ  ARG  135 4004    1906    2333    92  -506   6 4
ATOM   1011 NH1 ARG  135 14.917  27.843  37.833  1.000 22.26
ANISOU 1011 NH1 ARG  135 4114    2532    1812    460   -833 3 4 1
ATOM   1012 NH2 ARG  135 13.582  27.113  36.149  1.000 22.31
ANISOU 1012 NH2 ARG  135 4000    2243    2234    -544  -419 8
ATOM   1013 C   ARG  135 19.251  23.275  39.057  1.000 12.70
ANISOU 1013 C   ARG  135 1742    1264    1821    -119   -16  4 3 0
ATOM   1014 O   ARG  135 20.069  22.818  38.238  1.000 14.67
ANISOU 1014 O   ARG  135 2133    1529    1910    19 169 3 9 1
ATOM   1015 N   GLU  136 19.572  23.712  40.266  1.000 12.15
ANISOU 1015 N   GLU  136 1423    1372    1820    -36    70 4 3 0
ATOM   1016 CA  GLU  136 20.960  23.630  40.763  1.000 14.52
ANISOU 1016 CA  GLU  136 1622    1701    2194    -90   -197 3 7 1
ATOM   1017 CB  GLU  136 21.212  24.513  41.981  1.000 15.59
ANISOU 1017 CB  GLU  136 1502    1781    2642    14  -231   1 1
ATOM   1018 CG  GLU  136 21.064  26.020  41.783  1.000 18.01
ANISOU 1018 CG  GLU  136 2010    1762    3071    -232  -153 1 2 6
ATOM   1019 CD  GLU  136 21.798  26.484  40.537  1.000 20.18
ANISOU 1019 CD  GLU  136 2071    2079    3519    -308   89 3 6 9
ATOM   1020 OE1 GLU  136 22.987  26.148  40.394  1.000 24.64
ANISOU 1020 OE1 GLU  136 2060    2937    4364    -262   338  6 1 5
ATOM   1021 OE2 GLU  136 21.195  27.150  39.670  1.000 24.19
ANISOU 1021 OE2 GLU  136 2479    2327    4385    -381   317  1 4 2 6
ATOM   1022 C   GLU  136 21.364  22.186  41.076  1.000 14.00
ANISOU 1022 C   GLU  136 1338    1619    2361    -112  -442 2 2 3
ATOM   1023 O   GLU  136 22.508  21.781  40.833  1.000 13.86
ANISOU 1023 O   GLU  136 1366    1890    2009    -100  -287 3 2 9
ATOM   1024 N   VAL  137 20.472  21.338  41.580  1.000 11.78
ANISOU 1024 N   VAL  137 1309    1451    1715    148   -223 8 5
ATOM   1025 CA  VAL  137 20.753  19.896  41.771  1.000 12.49
ANISOU 1025 CA  VAL  137 1369    1522    1853    240    -69  2 8 9
ATOM   1026 CB  VAL  137 19.560  19.165  42.429  1.000 12.41
ANISOU 1026 CB  VAL  137 1422    1424    1869    -67    -85  -2 0 4
ATOM   1027 CG1 VAL  137 19.728  17.634  42.401  1.000 12.55
ANISOU 1027 CG1 VAL  137 1371    1508    1892    182    185  1 1 1
ATOM   1028 CG2 VAL  137 19.355  19.607  43.852  1.000 11.35
ANISOU 1028 CG2 VAL  137 1461    1281    1572    182   -254 2 8 8
ATOM   1029 C   VAL  137 21.100  19.241  40.435  1.000 12.48
ANISOU 1029 C   VAL  137 1202    1428    2113    150    -16  8 5
ATOM   1030 O   VAL  137 22.057  18.462  40.287  1.000 13.03
ANISOU 1030 O   VAL  137 1021    1683    2249    149     1  1 4 6
ATOM   1031 N   LEU  138 20.309  19.562  39.401  1.000 10.28
ANISOU 1031 N   LEU  138 1198    881  1829    -15    158 2 2 6
ATOM   1032 CA  LEU  138 20.571  19.029  38.066  1.000 12.48
ANISOU 1032 CA  LEU  138 1312    1408    2024    110    273   - 5 2
ATOM   1033 CB  LEU  138 19.398  19.358  37.130  1.000 11.81
ANISOU 1033 CB  LEU  138 1260    1586    1642    -20    383   4  3
ATOM   1034 CG  LEU  138 18.036  18.726  37.457  1.000 10.77
ANISOU 1034 CG  LEU  138 1391    1397    1304    -83    219   2 1 3
ATOM   1035 CD1 LEU  138 16.916  19.324  36.596  1.000 12.72
ANISOU 1035 CD1 LEU  138 1416    1587    1829    -59    -25   1 7 3
ATOM   1036 CD2 LEU  138 18.052  17.207  37.320  1.000 14.32
ANISOU 1036 CD2 LEU  138 1986    1390    2065    -79    296   3 7 0
ATOM   1037 C   LEU  138 21.903  19.525  37.505  1.000 13.61
ANISOU 1037 C   LEU  138 1305    2026    1840    -65    174   5
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ATOM   1038  O   LEU  138  22.695  18.760  36.920  1.000 14.97
ANISOU 1038  O   LEU  138   1125    2247    2313     105    234   178
ATOM   1039  N   ARG  139  22.184  20.816  37.614  1.000 13.26
ANISOU 1039  N   ARG  139   1432    2046    1561    -155    219   317
ATOM   1040  CA  ARG  139  23.397  21.372  37.085  1.000 14.71
ANISOU 1040  CA  ARG  139   1648    1941    2000     -27    502   447
ATOM   1041  C   ARG  139  24.636  20.815  37.775  1.000 15.16
ANISOU 1041  C   ARG  139   1425    2101    2235    -158    324   116
ATOM   1042  O   ARG  139  25.650  20.495  37.166  1.000 18.15
ANISOU 1042  O   ARG  139   1628    2581    2688      18    612   339
ATOM   1043  CB  ARG  139  23.394  22.926  37.206  1.000 19.67
ANISOU 1043  CB  ARG  139   1749    1923    3803    -196    186   252
ATOM   1044  CG  ARG  139  24.418  23.487  36.237  1.000 28.66
ANISOU 1044  CG  ARG  139   3924    2584    4383   -2305    882  -563
ATOM   1045  CD  ARG  139  24.245  24.997  36.111  1.000 39.58
ANISOU 1045  CD  ARG  139   6801    2389    5849   -3273    119  -306
ATOM   1046  NE  ARG  139  24.910  25.660  37.210  1.000 47.91
ANISOU 1046  NE  ARG  139   9548    2435    6222   -2157  -1331  -708
ATOM   1047  CZ  ARG  139  24.493  26.682  37.928  1.000 45.42
ANISOU 1047  CZ  ARG  139   6941    4516    5802    -882  -2118 -1238
ATOM   1048  NH1 ARG  139  23.316  27.273  37.722  1.000 64.33
ANISOU 1048  NH1 ARG  139   7248    8153    9039      93  -2965  -980
ATOM   1049  NH2 ARG  139  25.309  27.109  38.888  1.000 32.62
ANISOU 1049  NH2 ARG  139   5020    4758    2616   -2746    590   167
ATOM   1050  N   ALA  140  24.562  20.684  39.096  1.000 14.85
ANISOU 1050  N   ALA  140   1287    2204    2151     -517    -26   -46
ATOM   1051  CA  ALA  140  25.730  20.257  39.856  1.000 15.80
ANISOU 1051  CA  ALA  140   2649    2366    -309     -9  -401
ATOM   1052  CB  ALA  140  25.444  20.442  41.330  1.000 19.36
ANISOU 1052  CB  ALA  140   2685    2447    2222     243   -435  -480
ATOM   1053  C   ALA  140  26.111  18.806  39.584  1.000 16.86
ANISOU 1053  C   ALA  140   1555    2795    2054      12   -186   -458
ATOM   1054  O   ALA  140  27.258  18.403  39.796  1.000 18.90
ANISOU 1054  O   ALA  140   1538    2686    2958     -21     60   145
ATOM   1055  N   THR  141  25.147  18.025  39.098  1.000 17.53
ANISOU 1055  N   THR  141   1779    2532    2350    -528    218  -108
ATOM   1056  CA  THR  141  25.340  16.625  38.765  1.000 15.59
ANISOU 1056  CA  THR  141   1256    2401    2268    -192    -95   291
ATOM   1057  CB  THR  141  24.207  15.735  39.343  1.000 14.77
ANISOU 1057  CB  THR  141   1238    2200    2172     155    282   301
ATOM   1058  OG1 THR  141  22.946  16.168  38.849  1.000 12.47
ANISOU 1058  OG1 THR  141   1249    1565    1926     -31    295   476
ATOM   1059  CG2 THR  141  24.167  15.818  40.859  1.000 14.82
ANISOU 1059  CG2 THR  141   1394    2077    2160     135    -47   177
ATOM   1060  C   THR  141  25.423  16.374  37.257  1.000 16.11
ANISOU 1060  C   THR  141   1732    2046    2343     303    583   325
ATOM   1061  O   THR  141  25.432  15.235  36.778  1.000 17.55
ANISOU 1061  O   THR  141   1991    2104    2573     237    555   249
ATOM   1062  N   GLY  142  25.474  17.416  36.446  1.000 17.74
ANISOU 1062  N   GLY  142   2127    2197    2416     303    260   501
ATOM   1063  CA  GLY  142  25.611  17.263  34.987  1.000 17.32
ANISOU 1063  CA  GLY  142   1642    2494    2447    -160    453   517
ATOM   1064  C   GLY  142  24.426  16.556  34.358  1.000 16.37
ANISOU 1064  C   GLY  142   1619    1893    2710     261    472   42
ATOM   1065  O   GLY  142  24.654  15.824  33.379  1.000 18.43
ANISOU 1065  O   GLY  142   2243    2558    2201      57   798   163
ATOM   1066  N   THR  143  23.232  16.738  34.907  1.000 13.99
ANISOU 1066  N   THR  143   1531    1429    2356     83   430   350
ATOM   1067  CA  THR  143  22.049  16.003  34.472  1.000 14.69
ANISOU 1067  CA  THR  143   1768    1591    2223      8   342    93
ATOM   1068  CB  THR  143  21.208  15.584  35.700  1.000 15.52
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ANISOU 1068 CB  THR  143 1457    1653    2785    55 419 5 2 9
ATOM   1069 OG1 THR  143 22.037  14.784  36.573  1.000 14.63
ANISOU 1069 OG1 THR  143 1296    1792    2471    52 434 3 6 9
ATOM   1070 CG2 THR  143 20.044  14.738  35.231  1.000 14.24
ANISOU 1070 CG2 THR  143 1761    1981    1669    3  379 1 9 2
ATOM   1071 C   THR  143 21.135  16.785  33.532  1.000 13.96
ANISOU 1071 C   THR  143 1553    1708    2044    128   479  -1 3 1
ATOM   1072 O   THR  143 20.642  17.828  33.923  1.000 15.65
ANISOU 1072 O   THR  143 2374    1580    1995    315   486  5 5
ATOM   1073 N   GLU  144 20.928  16.279  32.322  1.000 15.32
ANISOU 1073 N   GLU  144 1734    1904    2184    -156  260  -2 7 1
ATOM   1074 CA  GLU  144 19.917  16.693  31.362  1.000 17.30
ANISOU 1074 CA  GLU  144 1686    2470    2417    -377  152  1 0 6
ATOM   1075 C   GLU  144 18.774  15.693  31.292  1.000 16.84
ANISOU 1075 C   GLU  144 1633    2380    2386    -298  313  -2 4 2
ATOM   1076 O   GLU  144 18.922  14.631  30.680  1.000 16.71
ANISOU 1076 O   GLU  144 1470    2057    2821    -43   610  5 8
ATOM   1077 CB  GLU  144 20.539  16.856  29.970  1.000 21.91
ANISOU 1077 CB  GLU  144 2747    3417    2162    -1508 31 -  8
ATOM   1078 CG  GLU  144 19.568  17.063  28.825  1.000 37.93
ANISOU 1078 CG  GLU  144 6652    4374    3385    -2057 -2082  1 7 6 7
ATOM   1079 CD  GLU  144 19.293  18.507  28.466  1.000 43.55
ANISOU 1079 CD  GLU  144 7869    4258    4419    -2497 -2259  2 1 2 9
ATOM   1080 OE1 GLU  144 19.602  19.365  29.326  1.000 51.81
ANISOU 1080 OE1 GLU  144 9843    4613    5230    -3180 -832  1 1 2 6
ATOM   1081 OE2 GLU  144 18.766  18.798  27.367  1.000 40.12
ANISOU 1081 OE2 GLU  144 5551    6029    3662    -285  -115 2 6 6 0
ATOM   1082 N   PRO  145 17.620  15.959  31.908  1.000 14.29
ANISOU 1082 N   PRO  145 1634    1364    2432    -4 208 2 6 5
ATOM   1083 CD  PRO  145 17.256  17.136  32.718  1.000 14.14
ANISOU 1083 CD  PRO  145 1735    1778    1859    -55   32 1 6 7
ATOM   1084 CA  PRO  145 16.507  15.000  31.807  1.000 13.72
ANISOU 1084 CA  PRO  145 1484    1391    2337    66 173 4 6 6
ATOM   1085 CB  PRO  145 15.406  15.701  32.606  1.000 14.20
ANISOU 1085 CB  PRO  145 1459    1636    2302    161   -41  2 8 9
ATOM   1086 CG  PRO  145 16.132  16.608  33.561  1.000 14.43
ANISOU 1086 CG  PRO  145 1796    2007    1679    -23   -42  4 4 9
ATOM   1087 C   PRO  145 16.076  14.794  30.372  1.000 15.18
ANISOU 1087 C   PRO  145 1745    1665    2359    -192  231  2 8 7
ATOM   1088 O   PRO  145 16.178  15.685  29.509  1.000 15.40
ANISOU 1088 O   PRO  145 2430    1511    1910    -85   613  -1 5
ATOM   1089 N   ASP  146 15.544  13.613  30.070  1.000 15.79
ANISOU 1089 N   ASP  146 2019    1611    2367    -191  666  8 1
ATOM   1090 CA  ASP  146 14.918  13.366  28.773  1.000 16.74
ANISOU 1090 CA  ASP  146 2095    1759    2506    -348  575  - 7 7
ATOM   1091 CB  ASP  146 14.300  11.966  28.727  1.000 18.99
ANISOU 1091 CB  ASP  146 2508    1729    2977    -323  780  - 4 3 9
ATOM   1092 CG  ASP  146 13.504  11.784  27.444  1.000 27.04
ANISOU 1092 CG  ASP  146 4012    2450    3813    -720  -229 - 8 0 5
ATOM   1093 OD1 ASP  146 12.295  12.121  27.409  1.000 38.65
ANISOU 1093 OD1 ASP  146 3943    4889    5852    -595  -1282  - 3 2 3
ATOM   1094 OD2 ASP  146 14.091  11.311  26.466  1.000 39.95
ANISOU 1094 OD2 ASP  146 6913    5052    3214    16 0  -1 1 8 2
ATOM   1095 C   ASP  146 13.860  14.441  28.552  1.000 16.65
ANISOU 1095 C   ASP  146 2461    1904    1961    -128  580  - 4 0
ATOM   1096 O   ASP  146 13.041  14.605  29.457  1.000 15.67
ANISOU 1096 O   ASP  146 2110    1935    1908    -334  381  - 4 2 0
ATOM   1097 N   GLY  147 13.871  15.149  27.429  1.000 20.60
ANISOU 1097 N   GLY  147 3484    2416    1927    -26   419  1 2 9
ATOM   1098 CA  GLY  147 12.903  16.212  27.155  1.000 18.06
ANISOU 1098 CA  GLY  147 2771    2451    1638    -382  98 9 3
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ATOM   1099 C   GLY  147 13.361  17.574  27.609  1.000 18.73
ANISOU 1099 C   GLY  147 2836    2195    2085    -524  143  527
ATOM   1100 O   GLY  147 12.676  18.570  27.282  1.000 18.34
ANISOU 1100 O   GLY  147 2865    2416    1687    -413  -72  389
ATOM   1101 N   GLY  148 14.498  17.634  28.316  1.000 16.35
ANISOU 1101 N   GLY  148 2936    1506    1772    -157  142  88
ATOM   1102 CA  GLY  148 15.116  18.889  28.747  1.000 15.34
ANISOU 1102 CA  GLY  148 2723    1279    1829    55  450  -26
ATOM   1103 C   GLY  148 14.768  19.339  30.144  1.000 12.97
ANISOU 1103 C   GLY  148 2231    1416    1280    -93   -62  407
ATOM   1104 O   GLY  148 13.769  18.930  30.771  1.000 13.79
ANISOU 1104 O   GLY  148 2301    1376    1561    -164  88  323
ATOM   1105 N   VAL  149 15.604  20.224  30.718  1.000 12.81
ANISOU 1105 N   VAL  149 1815    1366    1686    155   -31  238
ATOM   1106 CA  VAL  149 15.388  20.724  32.079  1.000 11.81
ANISOU 1106 CA  VAL  149 1333    1390    1765    54  -92  129
ATOM   1107 CB  VAL  149 16.594  21.636  32.480  1.000 11.97
ANISOU 1107 CB  VAL  149 1136    1696    1717    -100  246  124
ATOM   1108 CG1 VAL  149 16.358  22.336  33.802  1.000 15.26
ANISOU 1108 CG1 VAL  149 1941    1922    1936    -195  55  -223
ATOM   1109 CG2 VAL  149 17.868  20.794  32.538  1.000 17.21
ANISOU 1109 CG2 VAL  149 1231    2045    3265    45  102  -103
ATOM   1110 C   VAL  149 14.101  21.482  32.280  1.000 11.32
ANISOU 1110 C   VAL  149 1186    1303    1813    -78  131  479
ATOM   1111 O   VAL  149 13.378  21.218  33.253  1.000 12.35
ANISOU 1111 O   VAL  149 1664    1423    1608    -71  229  167
ATOM   1112 N   GLU  150 13.752  22.463  31.460  1.000 11.96
ANISOU 1112 N   GLU  150 1347    1453    1746    29  -36  420
ATOM   1113 CA  GLU  150 12.592  23.286  31.815  1.000 10.90
ANISOU 1113 CA  GLU  150 1623    1359    1159    118    0  405
ATOM   1114 CB  GLU  150 12.608  24.601  30.999  1.000 17.60
ANISOU 1114 CB  GLU  150 2530    1470    2687    181  -161  907
ATOM   1115 CG  GLU  150 13.811  25.488  31.314  1.000 17.86
ANISOU 1115 CG  GLU  150 2744    797   3246    246   434  202
ATOM   1116 CD  GLU  150 13.956  25.929  32.738  1.000 19.47
ANISOU 1116 CD  GLU  150 3018    1353    3027    -97   -84  662
ATOM   1117 OE1 GLU  150 12.951  26.005  33.475  1.000 18.21
ANISOU 1117 OE1 GLU  150 3035    1512    2373    -178  -321  536
ATOM   1118 OE2 GLU  150 15.109  26.237  33.122  1.000 22.59
ANISOU 1118 OE2 GLU  150 2993    1664    3927    -38  -150  284
ATOM   1119 C   GLU  150 11.277  22.533  31.705  1.000 12.22
ANISOU 1119 C   GLU  150 1429    1540    1676    235   147   -5
ATOM   1120 O   GLU  150 10.341  22.757  32.530  1.000 13.44
ANISOU 1120 O   GLU  150 1739    1474    1894    315   470  288
ATOM   1121 N   ALA  151 11.118  21.625  30.742  1.000 11.88
ANISOU 1121 N   ALA  151 1783    1255    1477    94   45  253
ATOM   1122 CA  ALA  151 9.881  20.844  30.698  1.000 13.82
ANISOU 1122 CA  ALA  151 1744    2054    1454    -100  -413  396
ATOM   1123 CB  ALA  151 9.739  20.094  29.390  1.000 14.89
ANISOU 1123 CB  ALA  151 1489    2318    1851    22  -269   -35
ATOM   1124 C   ALA  151 9.792  19.864  31.867  1.000 12.71
ANISOU 1124 C   ALA  151 1448    1463    1920    93   41  424
ATOM   1125 O   ALA  151 8.655  19.580  32.280  1.000 14.69
ANISOU 1125 O   ALA  151 1535    2114    1932    -242  204  -108
ATOM   1126 N   PHE  152 10.925  19.401  32.410  1.000 11.73
ANISOU 1126 N   PHE  152 1598    1259    1598    120    9  271
ATOM   1127 CA  PHE  152 10.890  18.554  33.602  1.000 10.61
ANISOU 1127 CA  PHE  152 1444    1061    1526    -33   34  160
ATOM   1128 CB  PHE  152 12.293  17.981  33.820  1.000 10.23
ANISOU 1128 CB  PHE  152 1317    1132    1437    -144  207  410
ATOM   1129 CG  PHE  152 12.517  17.187  35.095  1.000 10.36
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ANISOU 1129  CG  PHE  152 1388    1149   1399    -34   147  2 7 6
ATOM   1130  CD1 PHE  152 12.036  15.896 35.229  1.000 11.24
ANISOU 1130  CD1 PHE  152 1479    1047   1743    114   -103 5 6 6
ATOM   1131  CD2 PHE  152 13.229  17.701 36.154  1.000 11.21
ANISOU 1131  CD2 PHE  152 1489    1449   1319    85 174 1 5 1
ATOM   1132  CE1 PHE  152 12.252  15.163 36.380  1.000 10.80
ANISOU 1132  CE1 PHE  152 1400    1234   1467    249   -111 3 7 3
ATOM   1133  CE2 PHE  152 13.431  16.992 37.341  1.000 11.82
ANISOU 1133  CE2 PHE  152 1709    1622   1160    -276  414  2 5 0
ATOM   1134  CZ  PHE  152 12.932  15.717 37.457  1.000 11.97
ANISOU 1134  CZ  PHE  152 1651    1604   1293    -255  296  1 7 0
ATOM   1135  C   PHE  152 10.430  19.292 34.858  1.000 12.24
ANISOU 1135  C   PHE  152 1754    1168   1730    -10   339  8 4
ATOM   1136  O   PHE  152 9.728   18.729 35.726  1.000 11.49
ANISOU 1136  O   PHE  152 1672    1142   1550    200   109  2 7 7
ATOM   1137  N   LEU  153 10.809  20.575 34.997  1.000 11.86
ANISOU 1137  N   LEU  153 2030    1236   1240    -6 73 1 5 6
ATOM   1138  CA  LEU  153 10.532  21.386 36.155  1.000 11.99
ANISOU 1138  CA  LEU  153 1890    1229   1437    -165  307  8 5
ATOM   1139  CB  LEU  153 11.654  22.420 36.353  1.000 12.81
ANISOU 1139  CB  LEU  153 1691    1381   1794    -72   97 - 4 0
ATOM   1140  CG  LEU  153 13.059  21.910 36.592  1.000 12.87
ANISOU 1140  CG  LEU  153 1762    1645   1483    146   269  6 4
ATOM   1141  CD1 LEU  153 14.027  23.081 36.611  1.000 15.99
ANISOU 1141  CD1 LEU  153 1609    2006   2462    -49   450  - 4 3 1
ATOM   1142  CD2 LEU  153 13.185  21.158 37.914  1.000 19.37
ANISOU 1142  CD2 LEU  153 3091    2462   1806    809   275  5 4 0
ATOM   1143  C   LEU  153 9.179   22.084 36.123  1.000 12.96
ANISOU 1143  C   LEU  153 1728    1253   1943    -336  360  - 4 3
ATOM   1144  O   LEU  153 8.709   22.506 37.193  1.000 13.24
ANISOU 1144  O   LEU  153 1617    1302   2109    -443  481  - 1 8 2
ATOM   1145  N   ASP  154 8.568   22.203 34.955  1.000 13.29
ANISOU 1145  N   ASP  154 1643    1457   1951    60 517 2 8 0
ATOM   1146  CA  ASP  154 7.195   22.671 34.764  1.000 14.21
ANISOU 1146  CA  ASP  154 1862    1255   2280    313   631  6 8 3
ATOM   1147  CB  ASP  154 6.995   23.269 33.373  1.000 18.38
ANISOU 1147  CB  ASP  154 2091    2156   2738    328   728  1 4 7 5
ATOM   1148  CG  ASP  154 5.534   23.367 32.929  1.000 22.95
ANISOU 1148  CG  ASP  154 2323    3543   2855    676   430  1 5 0 1
ATOM   1149  OD1 ASP  154 4.685   23.607 33.820  1.000 20.85
ANISOU 1149  OD1 ASP  154 2164    2368   3389    895   478  1 1 4 4
ATOM   1150  OD2 ASP  154 5.168   23.254 31.702  1.000 24.33
ANISOU 1150  OD2 ASP  154 2989    3146   3110    228   48 1 1 2 8
ATOM   1151  C   ASP  154 6.294   21.455 34.985  1.000 11.22
ANISOU 1151  C   ASP  154 1594    1403   1265    123   147  4 1 0
ATOM   1152  O   ASP  154 6.043   20.729 34.015  1.000 13.31
ANISOU 1152  O   ASP  154 2143    1728   1186    427   219  1 7 0
ATOM   1153  N   CYS  155 5.891   21.220 36.233  1.000 9.91
ANISOU 1153  N   CYS  155 1425    1098   1243    -76  186  2 7
ATOM   1154  CA  CYS  155 5.446   19.881 36.627  1.000 9.41
ANISOU 1154  CA  CYS  155 1294    1168   1115    -13  154  1 7 2
ATOM   1155  CB  CYS  155 6.635   19.171 37.269  1.000 10.64
ANISOU 1155  CB  CYS  155 1276    1015   1753    28 -51 - 1 2 2
ATOM   1156  SG  CYS  155 7.316   19.819 38.797  1.000 12.01
ANISOU 1156  SG  CYS  155 1376    1554   1633    -195 -199 9 5
ATOM   1157  C   CYS  155 4.138   19.885 37.423  1.000 9.66
ANISOU 1157  C   CYS  155 1301    1355   1013    115  146  2 1 6
ATOM   1158  O   CYS  155 3.215   20.645 37.064  1.000 11.61
ANISOU 1158  O   CYS  155 1349    1386   1676    130  116  2 9 4
ATOM   1159  N   GLU  156 4.021   19.033 38.442  1.000 10.26
ANISOU 1159  N   GLU  156 1263    1495   1139    -29  168  2 9 9
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ATOM   1160 CA  GLU  156 2.778   18.787 39.173 1.000 9.04
ANISOU 1160 CA  GLU  156 998 1160     1278    -76    -37 236
ATOM   1161 CB  GLU  156 2.300   17.391 38.772 1.000 11.63
ANISOU 1161 CB  GLU  156 1187    1348    1885    -67   -135 -190
ATOM   1162 CG  GLU  156 1.841   17.282 37.326 1.000 14.29
ANISOU 1162 CG  GLU  156 1741    1640    2049    -628  -507 5 0
ATOM   1163 CD  GLU  156 0.502   17.949 37.039 1.000 17.90
ANISOU 1163 CD  GLU  156 1772    2692    2336    -365  -686 137
ATOM   1164 OE1 GLU  156 -0.220  18.241 38.024 1.000 19.17
ANISOU 1164 OE1 GLU  156 1429    2973    2884    -632  -270 253
ATOM   1165 OE2 GLU  156 0.136   18.198 35.858 1.000 22.03
ANISOU 1165 OE2 GLU  156 2449    3269    2653    -243  -721 924
ATOM   1166 C   GLU  156 2.961   18.942 40.677 1.000 9.21
ANISOU 1166 C   GLU  156 1166    1135    1197    -26   239  183
ATOM   1167 O   GLU  156 2.828   17.997 41.476 1.000 11.22
ANISOU 1167 O   GLU  156 1631    1199    1434    103   162  431
ATOM   1168 N   PRO  157 3.337   20.158 41.118 1.000 10.29
ANISOU 1168 N   PRO  157 1329    1201    1381    -109  21 123
ATOM   1169 CD  PRO  157 3.527   21.407 40.359 1.000 10.17
ANISOU 1169 CD  PRO  157 1381    1093    1391    -40   -30  2 1
ATOM   1170 CA  PRO  157 3.618   20.363 42.553 1.000 10.28
ANISOU 1170 CA  PRO  157 1160    1354    1391    -12   -61  6 4
ATOM   1171 CB  PRO  157 4.173   21.805 42.590 1.000 12.44
ANISOU 1171 CB  PRO  157 1832    1567    1330    -397  20 5 8
ATOM   1172 CG  PRO  157 3.475   22.471 41.429 1.000 10.44
ANISOU 1172 CG  PRO  157 1469    1259    1237    -388  166  -15
ATOM   1173 C   PRO  157 2.387   20.269 43.450 1.000 10.83
ANISOU 1173 C   PRO  157 1206    1554    1357    -89   -61  7 6
ATOM   1174 O   PRO  157 1.247   20.422 42.992 1.000 11.38
ANISOU 1174 O   PRO  157 1157    1742    1426    -93   -64  3 3
ATOM   1175 N   LEU  158 2.561   19.988 44.742 1.000 9.91
ANISOU 1175 N   LEU  158 1011    1308    1447    -86   -53  151
ATOM   1176 CA  LEU  158 1.524   19.940 45.764 1.000 10.85
ANISOU 1176 CA  LEU  158 1319    1461    1344    -387  -2 - 3
ATOM   1177 CB  LEU  158 1.152   18.482 46.078 1.000 11.03
ANISOU 1177 CB  LEU  158 1280    1447    1464    -251  99 9 3
ATOM   1178 CG  LEU  158 0.111   18.239 47.155 1.000 12.01
ANISOU 1178 CG  LEU  158 1271    1497    1795    -303  241  128
ATOM   1179 CD1 LEU  158 -1.212  18.826 46.736 1.000 16.21
ANISOU 1179 CD1 LEU  158 1224    2249    2685    -111  41 -239
ATOM   1180 CD2 LEU  158 -0.086  16.736 47.397 1.000 17.17
ANISOU 1180 CD2 LEU  158 2656    1542    2325    -254  1273 174
ATOM   1181 C   LEU  158 1.997   20.626 47.048 1.000 11.22
ANISOU 1181 C   LEU  158 1496    1366    1402    110   -304 5
ATOM   1182 O   LEU  158 3.056   20.201 47.539 1.000 11.28
ANISOU 1182 O   LEU  158 1283    1368    1635    20 -262  7 5
ATOM   1183 N   LEU  159 1.234   21.599 47.548 1.000 10.86
ANISOU 1183 N   LEU  159 1103    1744    1278    68 -180  - 70
ATOM   1184 CA  LEU  159 1.540   22.278 48.797 1.000 11.62
ANISOU 1184 CA  LEU  159 1247    1761    1407    -59   -68  -180
ATOM   1185 CB  LEU  159 1.494   23.802 48.640 1.000 12.44
ANISOU 1185 CB  LEU  159 1624    1747    1354    -209  -73  - 33
ATOM   1186 CG  LEU  159 1.633   24.635 49.934 1.000 12.83
ANISOU 1186 CG  LEU  159 1600    1698    1576    246   -54  -215
ATOM   1187 CD1 LEU  159 2.947   24.435 50.651 1.000 14.28
ANISOU 1187 CD1 LEU  159 2019    2250    1158    177   -292 104
ATOM   1188 CD2 LEU  159 1.442   26.134 49.640 1.000 13.33
ANISOU 1188 CD2 LEU  159 1802    1721    1543    87 -87 - 20
ATOM   1189 C   LEU  159 0.537   21.846 49.868 1.000 11.24
ANISOU 1189 C   LEU  159 1393    1474    1404    -174  -9 -271
ATOM   1190 O   LEU  159 -0.665  21.940 49.620 1.000 13.70
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ANISOU	1190	O	LEU	159	1354	2395	1457	-328	34 -269
ATOM	1191	N	ARG	160	1.013	21.385	51.010	1.000	14.59
ANISOU	1191	N	ARG	160	1737	2569	1239	-390	-128 -224
ATOM	1192	CA	ARG	160	0.158	21.030	52.153	1.000	13.94
ANISOU	1192	CA	ARG	160	1265	2631	1402	157	-137 9 2
ATOM	1193	CB	ARG	160	0.161	19.528	52.343	1.000	18.20
ANISOU	1193	CB	ARG	160	1932	2645	2338	-301	32 193
ATOM	1194	CG	ARG	160	-0.423	18.661	51.252	1.000	25.12
ANISOU	1194	CG	ARG	160	3451	2902	3191	-653	-787 2 3
ATOM	1195	CD	ARG	160	-0.765	17.301	51.831	1.000	31.98
ANISOU	1195	CD	ARG	160	4825	3598	3729	-1994	-905 3 2 1
ATOM	1196	NE	ARG	160	-1.284	16.322	50.896	1.000	26.15
ANISOU	1196	NE	ARG	160	3392	2957	3587	-739	-1056 3 1 0
ATOM	1197	CZ	ARG	160	-0.970	15.044	50.779	1.000	25.30
ANISOU	1197	CZ	ARG	160	3195	3390	3028	94	-785 2 9 5
ATOM	1198	NH1	ARG	160	-0.063	14.433	51.552	1.000	31.26
ANISOU	1198	NH1	ARG	160	3654	4142	4080	-629	-1089 2 0 5 4
ATOM	1199	NH2	ARG	160	-1.572	14.308	49.850	1.000	28.82
ANISOU	1199	NH2	ARG	160	4020	3122	3807	-13	-966 -9 0
ATOM	1200	C	ARG	160	0.649	21.669	53.447	1.000	15.12
ANISOU	1200	C	ARG	160	1649	2863	1232	104	-66 1 2 5
ATOM	1201	O	ARG	160	1.804	21.556	53.863	1.000	17.09
ANISOU	1201	O	ARG	160	1291	3411	1791	-400	74 -812
ATOM	1202	N	PHE	161	-0.258	22.369	54.114	1.000	14.95
ANISOU	1202	N	PHE	161	1512	2506	1660	-253	-8 -146
ATOM	1203	CA	PHE	161	-0.036	22.949	55.427	1.000	13.27
ANISOU	1203	CA	PHE	161	1600	1681	1760	-9	-249 -41
ATOM	1204	CB	PHE	161	-0.587	24.381	55.472	1.000	16.82
ANISOU	1204	CB	PHE	161	1594	1947	2851	384	58 6 4
ATOM	1205	CG	PHE	161	-0.317	25.109	56.771	1.000	22.56
ANISOU	1205	CG	PHE	161	2464	2424	3684	-39	790 -1067
ATOM	1206	CD1	PHE	161	-1.175	25.010	57.849	1.000	26.03
ANISOU	1206	CD1	PHE	161	3353	2919	3620	267	1106 -702
ATOM	1207	CD2	PHE	161	0.822	25.901	56.885	1.000	25.34
ANISOU	1207	CD2	PHE	161	2353	3265	4011	-179	-161 -738
ATOM	1208	CE1	PHE	161	-0.943	25.660	59.051	1.000	30.50
ANISOU	1208	CE1	PHE	161	4784	3324	3481	-972	1456 -620
ATOM	1209	CE2	PHE	161	1.061	26.553	58.080	1.000	26.10
ANISOU	1209	CE2	PHE	161	2546	3067	4302	-129	281 -1127
ATOM	1210	CZ	PHE	161	0.199	26.438	59.164	1.000	30.06
ANISOU	1210	CZ	PHE	161	3839	3197	4386	-152	774 -677
ATOM	1211	C	PHE	161	-0.737	22.073	56.447	1.000	13.93
ANISOU	1211	C	PHE	161	1842	1946	1503	-334	-277 -240
ATOM	1212	O	PHE	161	-1.916	21.843	56.270	1.000	18.26
ANISOU	1212	O	PHE	161	2000	3277	1662	-744	-399 4 7 5
ATOM	1213	N	ARG	162	-0.090	21.631	57.503	1.000	16.29
ANISOU	1213	N	ARG	162	2063	2516	1610	-937	-523 7 7
ATOM	1214	CA	ARG	162	-0.635	20.719	58.483	1.000	15.62
ANISOU	1214	CA	ARG	162	1772	2512	1650	-519	-266 7 6
ATOM	1215	C	ARG	162	-0.476	21.312	59.890	1.000	17.48
ANISOU	1215	C	ARG	162	1855	3131	1656	-603	-186 -76
ATOM	1216	O	ARG	162	0.609	21.734	60.251	1.000	17.23
ANISOU	1216	O	ARG	162	1928	3063	1557	-771	-42 -160
ATOM	1217	CB	ARG	162	0.081	19.374	58.458	1.000	21.99
ANISOU	1217	CB	ARG	162	3309	2318	2727	-272	-737 -22
ATOM	1218	CG	ARG	162	-0.573	18.322	59.348	1.000	26.07
ANISOU	1218	CG	ARG	162	3488	2375	4041	489	655 2 8 0
ATOM	1219	CD	ARG	162	-0.231	16.896	58.886	1.000	25.85
ANISOU	1219	CD	ARG	162	3106	2221	4495	418	-2 2 3 9
ATOM	1220	NE	ARG	162	-0.943	15.916	59.698	1.000	28.83
ANISOU	1220	NE	ARG	162	4379	2437	4139	-181	332 -177

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ATOM   1221 CZ  ARG  162 -0.642  14.638  59.879  1.000 27.99
ANISOU 1221 CZ  ARG  162 4271    2497    3868    -179  962  8  4
ATOM   1222 NH1 ARG  162 0.429   14.119  59.273  1.000 26.61
ANISOU 1222 NH1 ARG  162 3200    3167    3742    -91   -126 -268
ATOM   1223 NH2 ARG  162 -1.408  13.883  60.658  1.000 34.20
ANISOU 1223 NH2 ARG  162 3807    3522    5663    -986  702  780
ATOM   1224 N   TYR  163 -1.570  21.296  60.622  1.000 16.77
ANISOU 1224 N   TYR  163 1803    2865    1705    -484  -194 8  4
ATOM   1225 CA  TYR  163 -1.627  21.749  61.997  1.000 16.73
ANISOU 1225 CA  TYR  163 1819    2770    1766    -692  -51  4  0
ATOM   1226 CB  TYR  163 -2.712  22.804  62.116  1.000 18.99
ANISOU 1226 CB  TYR  163 2479    2560    2175    -427  -303 -214
ATOM   1227 CG  TYR  163 -3.173  23.206  63.488  1.000 23.52
ANISOU 1227 CG  TYR  163 2573    3821    2544    -16   -335 -868
ATOM   1228 CD1 TYR  163 -2.316  23.848  64.367  1.000 31.80
ANISOU 1228 CD1 TYR  163 3613    5005    3466    -1151 304  -2338
ATOM   1229 CE1 TYR  163 -2.731  24.222  65.625  1.000 40.74
ANISOU 1229 CE1 TYR  163 5855    5676    3950    -1906 976  -3116
ATOM   1230 CD2 TYR  163 -4.459  22.965  63.931  1.000 32.55
ANISOU 1230 CD2 TYR  163 3307    5654    3408    -1066 639  -2340
ATOM   1231 CE2 TYR  163 -4.902  23.332  65.189  1.000 42.99
ANISOU 1231 CE2 TYR  163 5626    6630    4080    -2352 1989 -2949
ATOM   1232 CZ  TYR  163 -4.017  23.960  66.025  1.000 42.52
ANISOU 1232 CZ  TYR  163 6281    5799    4075    -1721 1943 -3714
ATOM   1233 OH  TYR  163 -4.380  24.351  67.274  1.000 48.87
ANISOU 1233 OH  TYR  163 8167    6831    3569    -269  1801 -3052
ATOM   1234 C   TYR  163 -1.935  20.551  62.896  1.000 17.90
ANISOU 1234 C   TYR  163 2872    2353    1575    -894  -465 -173
ATOM   1235 O   TYR  163 -2.933  19.858  62.653  1.000 18.12
ANISOU 1235 O   TYR  163 2694    2130    2060    -732  -615 6  7
ATOM   1236 N   PHE  164 -1.112  20.326  63.898  1.000 18.32
ANISOU 1236 N   PHE  164 2516    2621    1826    -614  -402 -90
ATOM   1237 CA  PHE  164 -1.340  19.381  64.984  1.000 23.44
ANISOU 1237 CA  PHE  164 4176    2692    2038    -727  -669 219
ATOM   1238 CB  PHE  164 -0.073  18.617  65.327  1.000 26.02
ANISOU 1238 CB  PHE  164 4594    2824    2470    -459  -822 379
ATOM   1239 CG  PHE  164 0.407   17.669  64.231  1.000 29.00
ANISOU 1239 CG  PHE  164 4118    3639    3263    -518  -427 -254
ATOM   1240 CD1 PHE  164 1.224   18.118  63.205  1.000 27.11
ANISOU 1240 CD1 PHE  164 3040    4013    3249    -198  -821 4
ATOM   1241 CD2 PHE  164 0.051   16.332  64.240  1.000 28.37
ANISOU 1241 CD2 PHE  164 3935    3139    3704    472   30 - 64
ATOM   1242 CE1 PHE  164 1.657   17.248  62.223  1.000 28.13
ANISOU 1242 CE1 PHE  164 2730    3926    4034    -43   -229 6
ATOM   1243 CE2 PHE  164 0.459   15.464  63.250  1.000 31.71
ANISOU 1243 CE2 PHE  164 4719    3694    3635    -293  657  -383
ATOM   1244 CZ  PHE  164 1.276   15.924  62.234  1.000 30.26
ANISOU 1244 CZ  PHE  164 3827    3808    3862    0  300 126
ATOM   1245 C   PHE  164 -1.775  20.160  66.228  1.000 24.65
ANISOU 1245 C   PHE  164 3541    4049    1777    -1025 -455 3  7
ATOM   1246 O   PHE  164 -0.889  20.713  66.885  1.000 25.54
ANISOU 1246 O   PHE  164 3520    4167    2019    -921  -440 -257
ATOM   1247 N   PRO  165 -3.058  20.293  66.527  1.000 32.24
ANISOU 1247 N   PRO  165 3641    5095    3513    -1894 266  -680
ATOM   1248 CA  PRO  165 -3.486  21.012  67.720  1.000 32.98
ANISOU 1248 CA  PRO  165 3570    5737    3225    -1271 397  -322
ATOM   1249 C   PRO  165 -2.854  20.429  68.986  1.000 38.48
ANISOU 1249 C   PRO  165 4355    6808    3457    -1872 40 3 4 3
ATOM   1250 O   PRO  165 -2.551  19.230  69.034  1.000 53.87
ANISOU 1250 O   PRO  165 9948    7012    3507    -959  692  1750
ATOM   1251 CB  PRO  165 -5.001  20.820  67.769  1.000 37.76
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ANISOU	1251	CB	PRO	165	3640	6479	4227	-1488	380 -717
ATOM	1252	CG	PRO	165	-5.417	20.048	66.569	1.000	36.16
ANISOU	1252	CG	PRO	165	3341	6449	3948	-518	-349 -398
ATOM	1253	CD	PRO	165	-4.197	19.816	65.734	1.000	35.70
ANISOU	1253	CD	PRO	165	3440	6296	3828	-1656	-5 -604
ATOM	1254	N	LEU	178	4.459	8.087	66.987	1.000	36.23
ANISOU	1254	N	LEU	178	4509	3338	5918	-26	1216 1175
ATOM	1255	CA	LEU	178	4.994	9.117	66.116	1.000	28.63
ANISOU	1255	CA	LEU	178	3397	3170	4312	377	1344 401
ATOM	1256	CB	LEU	178	5.882	8.534	65.027	1.000	30.08
ANISOU	1256	CB	LEU	178	3497	3245	4688	760	752 -620
ATOM	1257	CG	LEU	178	7.245	7.948	65.348	1.000	29.43
ANISOU	1257	CG	LEU	178	3557	2950	4674	667	371 -979
ATOM	1258	CD1	LEU	178	7.859	7.367	64.073	1.000	32.13
ANISOU	1258	CD1	LEU	178	2972	4524	4713	586	810 -790
ATOM	1259	CD2	LEU	178	8.208	8.964	65.937	1.000	41.71
ANISOU	1259	CD2	LEU	178	5303	3695	6850	356	-1656 -1154
ATOM	1260	C	LEU	178	3.885	9.909	65.420	1.000	27.18
ANISOU	1260	C	LEU	178	2107	3534	4686	-175	1776 833
ATOM	1261	O	LEU	178	2.845	9.351	65.086	1.000	39.60
ANISOU	1261	O	LEU	178	2407	4624	8016	-1253	1290 2183
ATOM	1262	N	ARG	179	4.128	11.200	65.160	1.000	25.65
ANISOU	1262	N	ARG	179	2220	3437	4089	-216	878 741
ATOM	1263	CA	ARG	179	3.231	11.973	64.321	1.000	25.04
ANISOU	1263	CA	ARG	179	1860	3289	4365	69	641 1 5
ATOM	1264	C	ARG	179	3.297	11.572	62.852	1.000	24.51
ANISOU	1264	C	ARG	179	2158	2721	4434	39	99 -89
ATOM	1265	O	ARG	179	2.295	11.687	62.139	1.000	28.60
ANISOU	1265	O	ARG	179	2545	3242	5079	441	-332 -256
ATOM	1266	CB	ARG	179	3.517	13.480	64.451	1.000	28.58
ANISOU	1266	CB	ARG	179	3980	3317	3561	-110	-843 5 7
ATOM	1267	CG	ARG	179	2.936	14.092	65.724	1.000	30.01
ANISOU	1267	CG	ARG	179	3817	3725	3862	57	-957 -372
ATOM	1268	CD	ARG	179	3.307	15.570	65.757	1.000	31.51
ANISOU	1268	CD	ARG	179	4457	3675	3840	90	-1514 -338
ATOM	1269	NE	ARG	179	2.925	16.126	67.058	1.000	37.82
ANISOU	1269	NE	ARG	179	7035	3190	4144	153	-310 -15
ATOM	1270	CZ	ARG	179	2.897	17.425	67.292	1.000	39.43
ANISOU	1270	CZ	ARG	179	8420	3029	3532	-479	580 400
ATOM	1271	NH1	ARG	179	3.213	18.286	66.331	1.000	59.73
ANISOU	1271	NH1	ARG	179	11745	4676	6273	-1045	3177 1722
ATOM	1272	NH2	ARG	179	2.548	17.896	68.457	1.000	33.13
ANISOU	1272	NH2	ARG	179	5661	3832	3094	275	-1463 -173
ATOM	1273	N	MET	180	4.455	11.099	62.424	1.000	21.43
ANISOU	1273	N	MET	180	2013	2457	3674	-395	108 -222
ATOM	1274	CA	MET	180	4.695	10.539	61.108	1.000	20.07
ANISOU	1274	CA	MET	180	2346	1965	3315	-349	-300 151
ATOM	1275	C	MET	180	5.802	9.482	61.182	1.000	17.33
ANISOU	1275	C	MET	180	2251	2080	2254	-332	-86 337
ATOM	1276	O	MET	180	6.894	9.757	61.677	1.000	18.52
ANISOU	1276	O	MET	180	2237	2019	2781	-398	-79 5 2
ATOM	1277	CB	MET	180	5.041	11.646	60.136	1.000	22.64
ANISOU	1277	CB	MET	180	2571	2321	3709	-197	-549 683
ATOM	1278	CG	MET	180	5.065	11.367	58.678	1.000	27.90
ANISOU	1278	CG	MET	180	3918	3095	3588	-453	-654 913
ATOM	1279	SD	MET	180	4.945	12.838	57.629	1.000	25.01
ANISOU	1279	SD	MET	180	2936	2942	3626	-399	124 851
ATOM	1280	CE	MET	180	4.385	12.010	56.147	1.000	37.00
ANISOU	1280	CE	MET	180	5917	3450	4690	-258	-2680 1204
ATOM	1281	N	ALA	181	5.467	8.295	60.680	1.000	16.99
ANISOU	1281	N	ALA	181	2144	2139	2174	-90	-558 299

ATOM	1282	CA	ALA	181	6.396	7.168	60.676	1.000	16.12		
ANISOU	1282	CA	ALA	181	2275	1958	1890	-171	-343	6	0 2
ATOM	1283	CB	ALA	181	5.668	5.891	60.279	1.000	20.24		
ANISOU	1283	CB	ALA	181	2857	2158	2673	-648	694	1	0 6
ATOM	1284	C	ALA	181	7.576	7.409	59.738	1.000	15.43		
ANISOU	1284	C	ALA	181	2223	1717	1925	-315	-369	4	3 2
ATOM	1285	O	ALA	181	7.458	8.198	58.783	1.000	15.49		
ANISOU	1285	O	ALA	181	2268	1761	1858	-173	-296	4	3 4
ATOM	1286	N	PRO	182	8.698	6.733	59.986	1.000	16.03		
ANISOU	1286	N	PRO	182	2517	1745	1829	32	-78	5	3 1
ATOM	1287	CD	PRO	182	8.983	5.802	61.101	1.000	19.61		
ANISOU	1287	CD	PRO	182	2321	2908	2221	-210	-306	1	2 4 0
ATOM	1288	CA	PRO	182	9.865	6.907	59.076	1.000	14.78		
ANISOU	1288	CA	PRO	182	2573	1336	1706	-101	-86	2	9 9
ATOM	1289	CB	PRO	182	10.914	5.948	59.649	1.000	16.20		
ANISOU	1289	CB	PRO	182	2570	1978	1607	170	-251	7	7
ATOM	1290	CG	PRO	182	10.479	5.713	61.066	1.000	19.28		
ANISOU	1290	CG	PRO	182	2301	3071	1952	-199	-245	1	0 0 1
ATOM	1291	C	PRO	182	9.541	6.571	57.627	1.000	14.90		
ANISOU	1291	C	PRO	182	2230	1658	1772	-421	-262	3	4 0
ATOM	1292	O	PRO	182	8.920	5.573	57.249	1.000	15.38		
ANISOU	1292	O	PRO	182	2301	1587	1957	-467	-482	5	3 9
ATOM	1293	N	HIS	183	9.969	7.460	56.730	1.000	12.28		
ANISOU	1293	N	HIS	183	1737	1312	1617	-154	-284	1	5 6
ATOM	1294	CA	HIS	183	9.733	7.354	55.300	1.000	11.90		
ANISOU	1294	CA	HIS	183	1413	1495	1614	-254	-351	3	5
ATOM	1295	CB	HIS	183	8.300	7.824	54.922	1.000	12.43		
ANISOU	1295	CB	HIS	183	1399	1368	1957	-128	-241	1	1 2
ATOM	1296	CG	HIS	183	8.168	9.314	55.089	1.000	11.36		
ANISOU	1296	CG	HIS	183	1349	1369	1600	-367	-296	5	6
ATOM	1297	CD2	HIS	183	8.259	10.374	54.249	1.000	12.03		
ANISOU	1297	CD2	HIS	183	1684	1296	1589	-43	157	-	1 0
ATOM	1298	ND1	HIS	183	7.989	9.858	56.339	1.000	13.27		
ANISOU	1298	ND1	HIS	183	1901	1439	1700	-65	267	1	9 3
ATOM	1299	CE1	HIS	183	7.943	11.187	56.244	1.000	12.43		
ANISOU	1299	CE1	HIS	183	1939	1490	1296	77	-244	1	5 0
ATOM	1300	NE2	HIS	183	8.101	11.515	54.992	1.000	11.04		
ANISOU	1300	NE2	HIS	183	1560	1437	1199	215	-232	4	8
ATOM	1301	C	HIS	183	10.749	8.176	54.515	1.000	12.27		
ANISOU	1301	C	HIS	183	1446	1639	1577	-303	-282	-	6 7
ATOM	1302	O	HIS	183	11.433	9.032	55.064	1.000	12.94		
ANISOU	1302	O	HIS	183	1496	1915	1505	-558	-292	1	5
ATOM	1303	N	TYR	184	10.849	7.907	53.215	1.000	10.61		
ANISOU	1303	N	TYR	184	1453	1027	1552	-41	-380	1	1 0
ATOM	1304	CA	TYR	184	11.483	8.800	52.256	1.000	11.36		
ANISOU	1304	CA	TYR	184	1475	1104	1738	-71	-264	1	7 8
ATOM	1305	CB	TYR	184	12.628	8.151	51.481	1.000	11.79		
ANISOU	1305	CB	TYR	184	1631	1114	1734	-62	-197	3	4
ATOM	1306	CG	TYR	184	12.368	6.907	50.677	1.000	11.29		
ANISOU	1306	CG	TYR	184	1680	921	1688	225	-893	1	7 4
ATOM	1307	CD1	TYR	184	12.156	5.659	51.268	1.000	11.76		
ANISOU	1307	CD1	TYR	184	1663	927	1879	388	-487	1	9 0
ATOM	1308	CE1	TYR	184	11.911	4.526	50.492	1.000	12.64		
ANISOU	1308	CE1	TYR	184	1960	878	1964	173	-40	1	8 2
ATOM	1309	CD2	TYR	184	12.333	6.949	49.279	1.000	11.13		
ANISOU	1309	CD2	TYR	184	1252	1302	1674	109	-283	9	3
ATOM	1310	CE2	TYR	184	12.102	5.834	48.502	1.000	12.93		
ANISOU	1310	CE2	TYR	184	1944	1422	1546	49	-384	7	3
ATOM	1311	CZ	TYR	184	11.898	4.611	49.121	1.000	13.14		
ANISOU	1311	CZ	TYR	184	1717	1304	1972	30	-611	6	7
ATOM	1312	OH	TYR	184	11.663	3.490	48.343	1.000	15.45		

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ANISOU 1312 OH  TYR  184 2028    1471    2373    42 -476  -247
ATOM   1313 C   TYR  184 10.447  9.390   51.314  1.000 11.50
ANISOU 1313 C   TYR  184 1445    1215    1709    -187  -201 348
ATOM   1314 O   TYR  184 9.362   8.797   51.089  1.000 11.75
ANISOU 1314 O   TYR  184 1305    1308    1853    -106  -171 427
ATOM   1315 N   ASP  185 10.784  10.557  50.743  1.000 10.79
ANISOU 1315 N   ASP  185 1581    1069    1449    -141  -132 118
ATOM   1316 CA  ASP  185 9.861   11.218  49.815  1.000 9.10
ANISOU 1316 CA  ASP  185 1089    1093    1277    -326  23 206
ATOM   1317 CB  ASP  185 9.934   12.743  49.886  1.000 10.13
ANISOU 1317 CB  ASP  185 1427    1095    1327    -298  -178 177
ATOM   1318 CG  ASP  185 9.540   13.388  51.185  1.000 11.79
ANISOU 1318 CG  ASP  185 1797    1350    1333    -250  -149 11
ATOM   1319 OD1 ASP  185 9.681   14.638  51.278  1.000 13.79
ANISOU 1319 OD1 ASP  185 2050    1316    1875    135   -52  -26
ATOM   1320 OD2 ASP  185 9.114   12.755  52.189  1.000 13.31
ANISOU 1320 OD2 ASP  185 1805    1848    1405    -411  -63  105
ATOM   1321 C   ASP  185 10.098  10.759  48.371  1.000 9.44
ANISOU 1321 C   ASP  185 1036    1150    1401    -309  -26  100
ATOM   1322 O   ASP  185 11.234  10.469  48.005  1.000 10.64
ANISOU 1322 O   ASP  185 1167    1376    1500    -127  -35  -206
ATOM   1323 N   LEU  186 9.038   10.684  47.568  1.000 10.09
ANISOU 1323 N   LEU  186 1211    1186    1437    -272  -177 -58
ATOM   1324 CA  LEU  186 9.124   10.312  46.161  1.000 10.60
ANISOU 1324 CA  LEU  186 1641    986  1401    -239  -52  -44
ATOM   1325 CB  LEU  186 8.030   9.295   45.798  1.000 11.32
ANISOU 1325 CB  LEU  186 1652    929  1721    -111  17  -479
ATOM   1326 CG  LEU  186 7.989   7.977   46.602  1.000 12.60
ANISOU 1326 CG  LEU  186 1408    1039    2340    -263  -200 -166
ATOM   1327 CD1 LEU  186 6.896   7.064   46.028  1.000 16.64
ANISOU 1327 CD1 LEU  186 1900    1373    3049    -634  -398 -135
ATOM   1328 CD2 LEU  186 9.356   7.332   46.629  1.000 13.84
ANISOU 1328 CD2 LEU  186 1438    1245    2575    -155  443  283
ATOM   1329 C   LEU  186 9.024   11.521  45.223  1.000 10.90
ANISOU 1329 C   LEU  186 1327    1211    1603    -3  -451  164
ATOM   1330 O   LEU  186 8.768   11.406  44.031  1.000 13.60
ANISOU 1330 O   LEU  186 2067    1608    1494    -211  -321 103
ATOM   1331 N   SER  187 9.264   12.705  45.734  1.000 10.71
ANISOU 1331 N   SER  187 1546    1129    1393    -76  -282 318
ATOM   1332 CA  SER  187 9.401   13.943  44.998  1.000 10.49
ANISOU 1332 CA  SER  187 1427    1191    1370    195  -107 488
ATOM   1333 CB  SER  187 9.221   15.103  46.002  1.000 10.56
ANISOU 1333 CB  SER  187 1105    1048    1857    298  161  532
ATOM   1334 OG  SER  187 10.430  14.918  46.726  1.000 13.01
ANISOU 1334 OG  SER  187 1343    1432    2169    -132  -295 201
ATOM   1335 C   SER  187 10.774  14.062  44.336  1.000 10.47
ANISOU 1335 C   SER  187 1447    862  1669    135   -3  145
ATOM   1336 O   SER  187 11.684  13.246  44.513  1.000 10.54
ANISOU 1336 O   SER  187 1577    799  1629    183   -91  -77
ATOM   1337 N   MET  188 10.962  15.095  43.502  1.000 9.78
ANISOU 1337 N   MET  188 1419    978  1318    147   44  74
ATOM   1338 CA  MET  188 12.267  15.584  43.065  1.000 9.94
ANISOU 1338 CA  MET  188 1394    942  1441    182   58  37
ATOM   1339 CB  MET  188 12.128  16.543  41.891  1.000 10.89
ANISOU 1339 CB  MET  188 1523    840  1774    98  48 227
ATOM   1340 CG  MET  188 13.385  17.258  41.470  1.000 11.40
ANISOU 1340 CG  MET  188 1403    1172    1756    46  -51 214
ATOM   1341 SD  MET  188 14.687  16.134  40.891  1.000 12.71
ANISOU 1341 SD  MET  188 1619    1272    1940    139  137  198
ATOM   1342 CE  MET  188 16.061  17.267  40.790  1.000 13.86
ANISOU 1342 CE  MET  188 1862    1399    2003    -2  911  -90
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ATOM   1343 C   MET 188 12.946  16.217  44.291  1.000 12.13
ANISOU 1343 C   MET 188 1325    1586    1698    169   -18   -285
ATOM   1344 O   MET 188 13.971  15.727  44.804  1.000 11.52
ANISOU 1344 O   MET 188 1288    1553    1535    144   132   87
ATOM   1345 N   VAL 189 12.362  17.290  44.838  1.000 10.00
ANISOU 1345 N   VAL 189 1290    1217    1292    53  -175   6
ATOM   1346 CA  VAL 189 12.745  17.894  46.099  1.000 9.70
ANISOU 1346 CA  VAL 189 1209    1057    1420   -212  -45   -19
ATOM   1347 CB  VAL 189 13.618  19.154  45.979  1.000 9.97
ANISOU 1347 CB  VAL 189 1288    1103    1398   -238  129   189
ATOM   1348 CG1 VAL 189 14.953  18.837  45.266  1.000 13.45
ANISOU 1348 CG1 VAL 189 1334    1410    2368   -236  390   143
ATOM   1349 CG2 VAL 189 12.899  20.289  45.264  1.000 12.24
ANISOU 1349 CG2 VAL 189 1715    1242    1693   -25   150   295
ATOM   1350 C   VAL 189 11.469  18.245  46.871  1.000 10.10
ANISOU 1350 C   VAL 189 1089    1600    1149   -456  -156  -73
ATOM   1351 O   VAL 189 10.405  18.399  46.250  1.000 9.53
ANISOU 1351 O   VAL 189 1153    1249    1217   -222  -190  8
ATOM   1352 N   THR 190 11.609  18.327  48.187  1.000 8.66
ANISOU 1352 N   THR 190 1273    894   1123    15  -202   127
ATOM   1353 CA  THR 190 10.565  18.771  49.091  1.000 9.64
ANISOU 1353 CA  THR 190 1350    1167    1147   -11  -228  -99
ATOM   1354 CB  THR 190 10.194  17.699  50.132  1.000 10.69
ANISOU 1354 CB  THR 190 1231    1196    1635   -300  121   -54
ATOM   1355 OG1 THR 190 9.662   16.586  49.501  1.000 12.45
ANISOU 1355 OG1 THR 190 1333    1341    2055   -140  -258  -48
ATOM   1356 CG2 THR 190 9.038   18.131  51.019  1.000 13.59
ANISOU 1356 CG2 THR 190 1121    2222    1821   -272  151   -195
ATOM   1357 C   THR 190 11.058  19.976  49.891  1.000 9.23
ANISOU 1357 C   THR 190 1257    1096    1152   -102  -336  -49
ATOM   1358 O   THR 190 12.149  19.867  50.447  1.000 10.54
ANISOU 1358 O   THR 190 1322    1292    1390   -5  -359   -122
ATOM   1359 N   LEU 191 10.313  21.064  49.978  1.000 10.23
ANISOU 1359 N   LEU 191 1319    1167    1401   -71  -177  -133
ATOM   1360 CA  LEU 191 10.691  22.241  50.770  1.000 10.19
ANISOU 1360 CA  LEU 191 1259    1176    1438    0  -294   -142
ATOM   1361 CB  LEU 191 10.604  23.511  49.910  1.000 11.52
ANISOU 1361 CB  LEU 191 1203    1185    1990   -118  -601  32
ATOM   1362 CG  LEU 191 11.897  23.898  49.167  1.000 13.23
ANISOU 1362 CG  LEU 191 1898    1710    1419   -391  -358  97
ATOM   1363 CD1 LEU 191 12.333  22.794  48.218  1.000 15.25
ANISOU 1363 CD1 LEU 191 1685    2018    2091   -476  -214  -305
ATOM   1364 CD2 LEU 191 11.717  25.231  48.448  1.000 17.46
ANISOU 1364 CD2 LEU 191 2310    2044    2281   -14   176   04
ATOM   1365 C   LEU 191 9.798   22.328  52.006  1.000 11.93
ANISOU 1365 C   LEU 191 1275    1677    1579   56  -190  -372
ATOM   1366 O   LEU 191 8.560   22.262  51.868  1.000 13.49
ANISOU 1366 O   LEU 191 1276    2173    1676   1   -192  -601
ATOM   1367 N   ILE 192 10.394  22.483  53.190  1.000 11.06
ANISOU 1367 N   ILE 192 1115    1603    1487   -111  -92   -108
ATOM   1368 CA  ILE 192 9.671   22.539  54.443  1.000 11.13
ANISOU 1368 CA  ILE 192 1071    1638    1521   11  -173   -149
ATOM   1369 CB  ILE 192 9.927   21.304  55.330  1.000 12.94
ANISOU 1369 CB  ILE 192 2099    1586    1232   -65   -9   -233
ATOM   1370 CG2 ILE 192 9.221   21.428  56.673  1.000 16.06
ANISOU 1370 CG2 ILE 192 2479    1983    1641   -206  426   -215
ATOM   1371 CG1 ILE 192 9.512   20.028  54.590  1.000 15.51
ANISOU 1371 CG1 ILE 192 2633    1658    1601   -400  -48   -175
ATOM   1372 CD1 ILE 192 9.845   18.765  55.339  1.000 25.71
ANISOU 1372 CD1 ILE 192 5869    1608    2290   -175  -1566  -301
ATOM   1373 C   ILE 192 9.966   23.809  55.253  1.000 11.47
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ANISOU 1373  C   ILE 192 1330    1603   1427   -4 -222  -122
ATOM   1374  O   ILE 192 11.123  24.106 55.567 1.000 13.33
ANISOU 1374  O   ILE 192 1344    1738   1981   -96  -289 -219
ATOM   1375  N   GLN 193 8.904   24.525 55.602 1.000 15.78
ANISOU 1375  N   GLN 193 1316    2462   2219   -64   -5 -975
ATOM   1376  CA  GLN 193 8.987   25.653 56.533 1.000 14.56
ANISOU 1376  CA  GLN 193 1582    1858   2091   212  -304 -529
ATOM   1377  CB  GLN 193 8.449   26.975 56.020 1.000 20.03
ANISOU 1377  CB  GLN 193 2226    2203   3180   318  -329 142
ATOM   1378  CG  GLN 193 9.203   27.684 54.914 1.000 23.86
ANISOU 1378  CG  GLN 193 3399    2492   3174   313   45 280
ATOM   1379  CD  GLN 193 8.665   29.079 54.675 1.000 22.92
ANISOU 1379  CD  GLN 193 3250    2363   3097   78 -477  205
ATOM   1380  OE1 GLN 193 7.603   29.292 54.099 1.000 27.68
ANISOU 1380  OE1 GLN 193 4175    3310   3031   552  -1214  29
ATOM   1381  NE2 GLN 193 9.411   30.075 55.134 1.000 27.01
ANISOU 1381  NE2 GLN 193 3187    2667   4408   -440  124  17
ATOM   1382  C   GLN 193 8.216   25.265 57.804 1.000 15.14
ANISOU 1382  C   GLN 193 1945    1827   1982   136  -174 -722
ATOM   1383  O   GLN 193 7.147   24.662 57.714 1.000 27.80
ANISOU 1383  O   GLN 193 2523    6225   1817   -1586 -592 235
ATOM   1384  N   GLN 194 8.714   25.552 58.978 1.000 19.80
ANISOU 1384  N   GLN 194 2994    2502   2025   -632  -752 33
ATOM   1385  CA  GLN 194 8.100   25.080 60.213 1.000 22.89
ANISOU 1385  CA  GLN 194 3961    2626   2110   493   -20  52
ATOM   1386  C   GLN 194 7.763   26.236 61.141 1.000 27.79
ANISOU 1386  C   GLN 194 4886    2757   2916   823   25 -262
ATOM   1387  O   GLN 194 8.424   27.258 60.983 1.000 30.03
ANISOU 1387  O   GLN 194 4727    3168   3516   368  -259 -910
ATOM   1388  CB  GLN 194 9.086   24.170 60.950 1.000 23.97
ANISOU 1388  CB  GLN 194 3952    3133   2021   846   483  352
ATOM   1389  CG  GLN 194 9.398   22.835 60.314 1.000 21.94
ANISOU 1389  CG  GLN 194 2740    3238   2358   683  -182 -10
ATOM   1390  CD  GLN 194 10.546  22.148 61.052 1.000 20.51
ANISOU 1390  CD  GLN 194 2450    3433   1911   509  -321 -429
ATOM   1391  OE1 GLN 194 11.707  22.142 60.627 1.000 20.80
ANISOU 1391  OE1 GLN 194 2245    2996   2662   -171  -382 -681
ATOM   1392  NE2 GLN 194 10.223  21.585 62.197 1.000 24.91
ANISOU 1392  NE2 GLN 194 2539    3902   3023   210  -365 760
ATOM   1393  N   THR 195 6.817   26.035 62.030 1.000 32.47
ANISOU 1393  N   THR 195 5716    2729   3891   1095 1056 -616
ATOM   1394  CA  THR 195 6.588   26.708 63.282 1.000 35.83
ANISOU 1394  CA  THR 195 6329    3539   3748   1011  999  -722
ATOM   1395  CB  THR 195 5.263   27.492 63.357 1.000 37.96
ANISOU 1395  CB  THR 195 5756    4304   4365   647  2095 -1151
ATOM   1396  OG1 THR 195 4.191   26.576 63.604 1.000 48.36
ANISOU 1396  OG1 THR 195 6874    6076   5423   -806  2581 -1842
ATOM   1397  CG2 THR 195 4.958   28.175 62.033 1.000 44.54
ANISOU 1397  CG2 THR 195 2944    7471   6510   -872  -963 621
ATOM   1398  C   THR 195 6.590   25.684 64.429 1.000 48.86
ANISOU 1398  C   THR 195 10133   4924   3508   -321 -1356 -221
ATOM   1399  O   THR 195 6.122   24.544 64.293 1.000 64.12
ANISOU 1399  O   THR 195 13267   4150   6945   -264 -4541 1682
ATOM   1400  N   PHE 201 12.035  21.374 72.205 1.000 71.12
ANISOU 1400  N   PHE 201 13961    9034   4028   -5932 -1658 -1741
ATOM   1401  CA  PHE 201 11.775  20.053 71.629 1.000 49.44
ANISOU 1401  CA  PHE 201 7918    7543   3326   -3128 1317 -1488
ATOM   1402  CB  PHE 201 10.469  19.464 72.181 1.000 47.85
ANISOU 1402  CB  PHE 201 7119    6892   4168   -1869 1937 -1899
ATOM   1403  CG  PHE 201 10.130  18.113 71.545 1.000 46.41
ANISOU 1403  CG  PHE 201 6643    6596   4396   -2038 1879 -1497
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ATOM   1404 CD1 PHE   201 10.738  16.954  71.991  1.000 50.03
ANISOU 1404 CD1 PHE   201 7982    6634    4393    -2326 1092 -991
ATOM   1405 CD2 PHE   201 9.220   18.001  70.513  1.000 42.63
ANISOU 1405 CD2 PHE   201 5458    6427    4313    -1097 2449 -2268
ATOM   1406 CE1 PHE   201 10.434  15.739  71.417  1.000 49.95
ANISOU 1406 CE1 PHE   201 8275    6464    4240    -2047 227  -716
ATOM   1407 CE2 PHE   201 8.901   16.783  69.934  1.000 41.38
ANISOU 1407 CE2 PHE   201 6016    5946    3762    -578  2006 -1844
ATOM   1408 CZ  PHE   201 9.515   15.636  70.392  1.000 44.74
ANISOU 1408 CZ  PHE   201 7075    6261    3663    -1063 1020 -975
ATOM   1409 C   PHE   201 11.722  20.110  70.107  1.000 42.42
ANISOU 1409 C   PHE   201 6324    6442    3351    -1964 717  -1441
ATOM   1410 O   PHE   201 11.007  20.941  69.536  1.000 47.79
ANISOU 1410 O   PHE   201 9668    4400    4090    -762  691  -2416
ATOM   1411 N   VAL   202 12.477  19.232  69.449  1.000 34.04
ANISOU 1411 N   VAL   202 4525    5852    2558    -1948 7  -425
ATOM   1412 CA  VAL   202 12.535  19.245  67.993  1.000 25.09
ANISOU 1412 CA  VAL   202 3221    3752    2558    -1041 -182 9  9
ATOM   1413 CB  VAL   202 13.988  19.286  67.489  1.000 22.88
ANISOU 1413 CB  VAL   202 2832    3430    2432    -577  -691 -198
ATOM   1414 CG1 VAL   202 14.053  19.387  65.965  1.000 26.02
ANISOU 1414 CG1 VAL   202 3821    3594    2470    -958  35  -277
ATOM   1415 CG2 VAL   202 14.771  20.443  68.078  1.000 24.69
ANISOU 1415 CG2 VAL   202 3043    3473    2867    -786  -410 -320
ATOM   1416 C   VAL   202 11.798  18.035  67.421  1.000 20.69
ANISOU 1416 C   VAL   202 3027    2810    2023    -648  58 615
ATOM   1417 O   VAL   202 12.288  16.914  67.581  1.000 26.08
ANISOU 1417 O   VAL   202 3294    3219    3396    -136  452  884
ATOM   1418 N   SER   203 10.662  18.234  66.766  1.000 20.21
ANISOU 1418 N   SER   203 3100    2794    1787    -414  25  -152
ATOM   1419 CA  SER   203 9.820   17.192  66.218  1.000 20.37
ANISOU 1419 CA  SER   203 3149    2709    1884    -355  129  -256
ATOM   1420 CB  SER   203 8.437   17.779  65.896  1.000 24.72
ANISOU 1420 CB  SER   203 2726    4106    2558    -178  369  -1015
ATOM   1421 OG  SER   203 7.841   18.239  67.097  1.000 31.80
ANISOU 1421 OG  SER   203 3328    5782    2974    -457  1175 -1104
ATOM   1422 C   SER   203 10.367  16.524  64.958  1.000 19.13
ANISOU 1422 C   SER   203 2580    2647    2040    -339  170  -244
ATOM   1423 O   SER   203 10.279  15.302  64.832  1.000 17.01
ANISOU 1423 O   SER   203 2311    2625    1527    -414  206  -18
ATOM   1424 N   LEU   204 10.902  17.259  63.998  1.000 16.16
ANISOU 1424 N   LEU   204 2142    1976    2024    71 77  -292
ATOM   1425 CA  LEU   204 11.403  16.679  62.740  1.000 14.07
ANISOU 1425 CA  LEU   204 1670    1626    2049    -22  -24  -283
ATOM   1426 CB  LEU   204 11.269  17.704  61.618  1.000 13.80
ANISOU 1426 CB  LEU   204 1549    1763    1931    -249 -340 -277
ATOM   1427 CG  LEU   204 11.647  17.272  60.212  1.000 14.13
ANISOU 1427 CG  LEU   204 1726    1722    1919    -253 -482 -412
ATOM   1428 CD1 LEU   204 10.770  16.134  59.680  1.000 18.76
ANISOU 1428 CD1 LEU   204 2579    2895    1654    -1297 -927 -106
ATOM   1429 CD2 LEU   204 11.609  18.478  59.255  1.000 16.20
ANISOU 1429 CD2 LEU   204 1987    2095    2074    65 75  -123
ATOM   1430 C   LEU   204 12.832  16.140  62.885  1.000 14.81
ANISOU 1430 C   LEU   204 1734    1748    2144    9  -199  -250
ATOM   1431 O   LEU   204 13.699  16.853  63.397  1.000 15.52
ANISOU 1431 O   LEU   204 1833    1789    2274    -59  -435 -42
ATOM   1432 N   GLN   205 13.065  14.900  62.469  1.000 14.42
ANISOU 1432 N   GLN   205 1847    1804    1827    189  -120 -153
ATOM   1433 CA  GLN   205 14.288  14.143  62.574  1.000 12.76
ANISOU 1433 CA  GLN   205 1777    1655    1419    43 -347  -113
ATOM   1434 C   GLN   205 14.622  13.434  61.260  1.000 11.12
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ANISOU 1434  C   GLN  205  1412   1474   1338   49 -468  -21
ATOM   1435  O   GLN  205  13.707  12.927  60.606  1.000 13.97
ANISOU 1435  O   GLN  205  1622   2235   1449   -293  -449  -147
ATOM   1436  CB  GLN  205  14.164  13.062  63.662  1.000 15.57
ANISOU 1436  CB  GLN  205  2421   1925   1568   341   151  83
ATOM   1437  CG  GLN  205  13.863  13.635  65.032  1.000 18.58
ANISOU 1437  CG  GLN  205  3321   2286   1451   689   -129  82
ATOM   1438  CD  GLN  205  15.086  14.243  65.680  1.000 24.33
ANISOU 1438  CD  GLN  205  3687   3465   2091   520   -499  -570
ATOM   1439  OE1 GLN  205  16.206  13.717  65.549  1.000 29.12
ANISOU 1439  OE1 GLN  205  3350   3464   4251   14  -270  -1800
ATOM   1440  NE2 GLN  205  14.840  15.356  66.378  1.000 23.01
ANISOU 1440  NE2 GLN  205  3055   2465   3225   335   -592  -140
ATOM   1441  N   ALA  206  15.893  13.401  60.893  1.000 12.63
ANISOU 1441  N   ALA  206  1523   1770   1506   -251  -234  -6
ATOM   1442  CA  ALA  206  16.335  12.649  59.731  1.000 13.77
ANISOU 1442  CA  ALA  206  1392   2099   1742   -522  -72  -295
ATOM   1443  CB  ALA  206  16.693  13.519  58.528  1.000 16.34
ANISOU 1443  CB  ALA  206  2034   2494   1682   -603  123  -277
ATOM   1444  C   ALA  206  17.567  11.813  60.046  1.000 15.92
ANISOU 1444  C   ALA  206  1489   2331   2230   -290  179  -341
ATOM   1445  O   ALA  206  18.368  12.182  60.908  1.000 15.86
ANISOU 1445  O   ALA  206  1877   1772   2377   150  -356  30
ATOM   1446  N   GLU  207  17.707  10.712  59.305  1.000 16.98
ANISOU 1446  N   GLU  207  1981   2086   2383   -335  348  -186
ATOM   1447  CA  GLU  207  18.938  9.942  59.364  1.000 20.58
ANISOU 1447  CA  GLU  207  2198   1938   3684   -164  490  -10
ATOM   1448  C   GLU  207  20.082  10.688  58.681  1.000 18.75
ANISOU 1448  C   GLU  207  1828   2037   3260   272  185  558
ATOM   1449  O   GLU  207  19.948  10.953  57.503  1.000 18.23
ANISOU 1449  O   GLU  207  1746   2145   3034   52 8  -45
ATOM   1450  CB  GLU  207  18.665  8.612  58.676  1.000 25.81
ANISOU 1450  CB  GLU  207  3289   1794   4724   -19  83  -135
ATOM   1451  CG  GLU  207  19.879  7.737  58.429  1.000 30.08
ANISOU 1451  CG  GLU  207  4102   2221   5105   907  -948  -546
ATOM   1452  CD  GLU  207  19.429  6.356  57.959  1.000 29.93
ANISOU 1452  CD  GLU  207  5549   2024   3798   1179  -2099  -123
ATOM   1453  OE1 GLU  207  19.491  5.471  58.839  1.000 35.14
ANISOU 1453  OE1 GLU  207  5782   2692   4879   938  -931  885
ATOM   1454  OE2 GLU  207  19.037  6.251  56.762  1.000 38.62
ANISOU 1454  OE2 GLU  207  4955   5608   4109   135  -2494  -366
ATOM   1455  N   VAL  208  21.146  10.997  59.414  1.000 16.97
ANISOU 1455  N   VAL  208  1926   1974   2549   120  337  807
ATOM   1456  CA  VAL  208  22.376  11.593  58.902  1.000 17.77
ANISOU 1456  CA  VAL  208  1894   2109   2748   93  500  411
ATOM   1457  CB  VAL  208  22.455  13.111  59.155  1.000 16.89
ANISOU 1457  CB  VAL  208  2774   2148   1494   -372  -149  569
ATOM   1458  CG1 VAL  208  23.652  13.688  58.409  1.000 20.76
ANISOU 1458  CG1 VAL  208  3214   2150   2526   -423  647  148
ATOM   1459  CG2 VAL  208  21.172  13.815  58.720  1.000 16.36
ANISOU 1459  CG2 VAL  208  3146   1640   1431   25  98  353
ATOM   1460  C   VAL  208  23.585  10.877  59.507  1.000 20.29
ANISOU 1460  C   VAL  208  1936   2555   3217   11  -58  132
ATOM   1461  O   VAL  208  23.726  10.829  60.741  1.000 20.74
ANISOU 1461  O   VAL  208  2436   2256   3187   460  206  544
ATOM   1462  N   GLY  209  24.457  10.295  58.672  1.000 18.94
ANISOU 1462  N   GLY  209  1764   2445   2989   211  -494  15
ATOM   1463  CA  GLY  209  25.558  9.508  59.194  1.000 24.01
ANISOU 1463  CA  GLY  209  2171   3040   3910   549  -396  709
ATOM   1464  C   GLY  209  25.123  8.364  60.082  1.000 25.00
ANISOU 1464  C   GLY  209  2874   3156   3470   1406  772  649
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ATOM   1465  O   GLY  209  25.850   7.934  60.991  1.000  35.98
ANISOU 1465  O   GLY  209   4448    3946    5279    1425   -426   1769
ATOM   1466  N   GLY  210  23.951   7.786  59.869  1.000  25.89
ANISOU 1466  N   GLY  210   3802    2756    3278     523    899    749
ATOM   1467  CA  GLY  210  23.477   6.678  60.671  1.000  26.43
ANISOU 1467  CA  GLY  210   4479    2136    3427    1228    742    912
ATOM   1468  C   GLY  210  22.885   7.025  62.016  1.000  28.45
ANISOU 1468  C   GLY  210   5472    2099    3237     831   1029   1175
ATOM   1469  O   GLY  210  22.634   6.098  62.789  1.000  40.26
ANISOU 1469  O   GLY  210   7322    2719    5256    1881   2759   2360
ATOM   1470  N   ALA  211  22.651   8.281  62.338  1.000  25.78
ANISOU 1470  N   ALA  211   4671    2359    2763    1370    724   1197
ATOM   1471  CA  ALA  211  22.048   8.671  63.613  1.000  23.74
ANISOU 1471  CA  ALA  211   2966    3156    2896     727    339    663
ATOM   1472  CB  ALA  211  23.093   9.333  64.496  1.000  29.57
ANISOU 1472  CB  ALA  211   2957    4372    3906     834    -96      6    9
ATOM   1473  C   ALA  211  20.900   9.626  63.360  1.000  21.19
ANISOU 1473  C   ALA  211   3090    2611    2350     484    178    741
ATOM   1474  O   ALA  211  20.936  10.381  62.399  1.000  23.91
ANISOU 1474  O   ALA  211   3771    2659    2653     -30    -66    930
ATOM   1475  N   PHE  212  19.889   9.629  64.204  1.000  19.88
ANISOU 1475  N   PHE  212   2603    2577    2375     398   -128   374
ATOM   1476  CA  PHE  212  18.814  10.613  64.130  1.000  19.13
ANISOU 1476  CA  PHE  212   2581    2257    2432     284   -565   317
ATOM   1477  C   PHE  212  19.320  12.006  64.489  1.000  20.00
ANISOU 1477  C   PHE  212   3004    2480    2115     133   -640     6    8
ATOM   1478  O   PHE  212  19.893  12.230  65.569  1.000  21.10
ANISOU 1478  O   PHE  212   2497    3558    1964    -391   -406   222
ATOM   1479  CB  PHE  212  17.688  10.290  65.096  1.000  21.37
ANISOU 1479  CB  PHE  212   2553    2616    2952     293   -197   -184
ATOM   1480  CG  PHE  212  17.010   8.950  64.912  1.000  23.45
ANISOU 1480  CG  PHE  212   2161    3496    3253    -376   -282   -558
ATOM   1481  CD1 PHE  212  16.369   8.377  65.990  1.000  23.33
ANISOU 1481  CD1 PHE  212   2545    3115    3206    -382   -350   -508
ATOM   1482  CD2 PHE  212  17.029   8.302  63.687  1.000  25.83
ANISOU 1482  CD2 PHE  212   2554    3962    3299    -622   -217   -787
ATOM   1483  CE1 PHE  212  15.730   7.149  65.872  1.000  28.13
ANISOU 1483  CE1 PHE  212   3784    3544    3362   -1119     96   -973
ATOM   1484  CE2 PHE  212  16.419   7.072  63.569  1.000  23.04
ANISOU 1484  CE2 PHE  212   2504    2960    3289     382   -232   -558
ATOM   1485  CZ  PHE  212  15.781   6.486  64.651  1.000  27.88
ANISOU 1485  CZ  PHE  212   3658    3977    2957   -1072   -501   -760
ATOM   1486  N   THR  213  19.076  12.936  63.578  1.000  18.30
ANISOU 1486  N   THR  213   2690    2083    2181     149   -583    -93
ATOM   1487  CA  THR  213  19.566  14.310  63.681  1.000  17.99
ANISOU 1487  CA  THR  213   1976    2139    2721     230   -686   -287
ATOM   1488  CB  THR  213  20.515  14.586  62.498  1.000  20.43
ANISOU 1488  CB  THR  213   1798    2280    3683     140   -119   -423
ATOM   1489  OG1 THR  213  21.638  13.695  62.629  1.000  25.33
ANISOU 1489  OG1 THR  213   2571    3378    3676     925     71    528
ATOM   1490  CG2 THR  213  21.087  15.985  62.485  1.000  21.11
ANISOU 1490  CG2 THR  213   1935    2667    3420    -310   -289   -747
ATOM   1491  C   THR  213  18.391  15.277  63.641  1.000  15.53
ANISOU 1491  C   THR  213   1732    2135    2032     111   -557   -167
ATOM   1492  O   THR  213  17.533  15.195  62.761  1.000  16.11
ANISOU 1492  O   THR  213   1742    2197    2180    -327   -669     56
ATOM   1493  N   ASP  214  18.362  16.199  64.590  1.000  15.60
ANISOU 1493  N   ASP  214   2025    2046    1857     64   -405      2
ATOM   1494  CA  ASP  214  17.380  17.256  64.672  1.000  15.59
ANISOU 1494  CA  ASP  214   2130    1722    2072      2  -1010   -242
ATOM   1495  CB  ASP  214  17.744  18.200  65.822  1.000  17.13
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ANISOU 1495 CB  ASP  214 2528    1893    2086    -226  -1022  -247
ATOM   1496 CG  ASP  214 17.612  17.672  67.219  1.000 20.21
ANISOU 1496 CG  ASP  214 3138    2495    2045    -451  -1276  -148
ATOM   1497 OD1 ASP  214 17.079  16.571  67.460  1.000 20.87
ANISOU 1497 OD1 ASP  214 2778    2632    2518    -247  -505  151
ATOM   1498 OD2 ASP  214 18.076  18.401  68.127  1.000 28.05
ANISOU 1498 OD2 ASP  214 5110    3118    2429    -257  -1997  -619
ATOM   1499 C   ASP  214 17.314  18.146  63.441  1.000 15.14
ANISOU 1499 C   ASP  214 2029    1822    1901    182   -574  -319
ATOM   1500 O   ASP  214 18.349  18.552  62.897  1.000 17.63
ANISOU 1500 O   ASP  214 1956    2032    2710    -214  -810  -15
ATOM   1501 N   LEU  215 16.105  18.493  63.027  1.000 14.69
ANISOU 1501 N   LEU  215 1936    1758    1887    38   -334  242
ATOM   1502 CA  LEU  215 15.915  19.504  61.979  1.000 13.35
ANISOU 1502 CA  LEU  215 1820    1753    1498    89   -22  59
ATOM   1503 CB  LEU  215 15.352  18.819  60.734  1.000 14.24
ANISOU 1503 CB  LEU  215 1735    2167    1506    -98    75   -3
ATOM   1504 CG  LEU  215 16.291  17.813  60.056  1.000 16.39
ANISOU 1504 CG  LEU  215 2031    2285    1911    -340   320  -424
ATOM   1505 CD1 LEU  215 15.517  16.999  59.031  1.000 22.61
ANISOU 1505 CD1 LEU  215 3139    2024    3427    -10   -801  -877
ATOM   1506 CD2 LEU  215 17.482  18.543  59.434  1.000 26.93
ANISOU 1506 CD2 LEU  215 1998    5409    2827    -1083  909  -542
ATOM   1507 C   LEU  215 15.002  20.622  62.500  1.000 14.65
ANISOU 1507 C   LEU  215 1770    1607    2190    86  -165  -95
ATOM   1508 O   LEU  215 13.822  20.662  62.151  1.000 19.45
ANISOU 1508 O   LEU  215 1748    2165    3476    116   -303  -203
ATOM   1509 N   PRO  216 15.552  21.523  63.314  1.000 15.99
ANISOU 1509 N   PRO  216 2390    1970    1715    -164   21  -175
ATOM   1510 CD  PRO  216 16.955  21.601  63.757  1.000 19.37
ANISOU 1510 CD  PRO  216 2900    2306    2155    -83   -790  -548
ATOM   1511 CA  PRO  216 14.760  22.620  63.846  1.000 18.68
ANISOU 1511 CA  PRO  216 3104    2017    1976    12   -74  -420
ATOM   1512 CB  PRO  216 15.649  23.227  64.949  1.000 18.63
ANISOU 1512 CB  PRO  216 3592    1517    1971    -120  -421  9
ATOM   1513 CG  PRO  216 17.030  22.847  64.581  1.000 22.35
ANISOU 1513 CG  PRO  216 3401    2426    2666    -419  -427  -783
ATOM   1514 C   PRO  216 14.461  23.700  62.819  1.000 18.50
ANISOU 1514 C   PRO  216 2921    2083    2026    58   -465  -473
ATOM   1515 O   PRO  216 15.024  23.854  61.731  1.000 19.82
ANISOU 1515 O   PRO  216 2752    2453    2325    -32   -375  19
ATOM   1516 N   TYR  217 13.487  24.536  63.194  1.000 20.05
ANISOU 1516 N   TYR  217 3213    1981    2422    90   -482  -718
ATOM   1517 CA  TYR  217 13.178  25.662  62.308  1.000 22.97
ANISOU 1517 CA  TYR  217 2849    2652    3227    211   -1467  -313
ATOM   1518 C   TYR  217 14.347  26.647  62.283  1.000 23.92
ANISOU 1518 C   TYR  217 4139    2131    2819    -337  -1776  -165
ATOM   1519 O   TYR  217 15.149  26.726  63.213  1.000 30.46
ANISOU 1519 O   TYR  217 4321    3440    3812    -1118 -2477  728
ATOM   1520 CB  TYR  217 11.891  26.314  62.768  1.000 32.68
ANISOU 1520 CB  TYR  217 3958    3294    5164    1148   -874  -783
ATOM   1521 CG  TYR  217 12.064  27.462  63.718  1.000 44.77
ANISOU 1521 CG  TYR  217 6829    4326    5854    895    38  -1870
ATOM   1522 CD1 TYR  217 11.853  28.763  63.285  1.000 54.26
ANISOU 1522 CD1 TYR  217 10311   3688    6615    -323   132  -1945
ATOM   1523 CD2 TYR  217 12.428  27.243  65.043  1.000 57.77
ANISOU 1523 CD2 TYR  217 10635   5155    6158    -1027 -1446  -1931
ATOM   1524 CE1 TYR  217 12.011  29.816  64.174  1.000 60.33
ANISOU 1524 CE1 TYR  217 11807   4345    6772    -1101 -132  -2259
ATOM   1525 CE2 TYR  217 12.585  28.296  65.926  1.000 64.51
ANISOU 1525 CE2 TYR  217 12481   5199    6832    -1936 -1520  -2074
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ATOM   1526 CZ  TYR  217 12.378  29.586  65.481  1.000 64.11
ANISOU 1526 CZ  TYR  217 12047    5183    7129    -1460 -817 -2160
ATOM   1527 OH  TYR  217 12.536  30.639  66.358  1.000 63.69
ANISOU 1527 OH  TYR  217 11840    5206    7153    -1832 -1191 -2064
ATOM   1528 N   ARG  218 14.418  27.374  61.188  1.000 24.08
ANISOU 1528 N   ARG  218 4482     1611    3055    507   -1471 -145
ATOM   1529 CA  ARG  218 15.335  28.465  60.948  1.000 30.71
ANISOU 1529 CA  ARG  218 5932     2490    3245    -504  -1565 382
ATOM   1530 CB  ARG  218 16.326  28.135  59.840  1.000 35.08
ANISOU 1530 CB  ARG  218 5969     2797    4562    -1397 -779 -348
ATOM   1531 CG  ARG  218 17.401  27.114  60.073  1.000 35.77
ANISOU 1531 CG  ARG  218 6009     3087    4497    -1107 -733 -773
ATOM   1532 CD  ARG  218 18.658  27.775  60.626  1.000 34.46
ANISOU 1532 CD  ARG  218 5680     3264    4152    -1242 -244 -619
ATOM   1533 NE  ARG  218 19.223  28.746  59.709  1.000 29.51
ANISOU 1533 NE  ARG  218 4707     2579    3926    78 81 -629
ATOM   1534 CZ  ARG  218 20.218  28.620  58.830  1.000 33.18
ANISOU 1534 CZ  ARG  218 5269     3166    4170    60 452 -1075
ATOM   1535 NH1 ARG  218 20.839  27.452  58.709  1.000 27.44
ANISOU 1535 NH1 ARG  218 4202     2881    3341    -503  -373 -1585
ATOM   1536 NH2 ARG  218 20.583  29.675  58.077  1.000 22.96
ANISOU 1536 NH2 ARG  218 2327     3579    2817    233   -1117 -872
ATOM   1537 C   ARG  218 14.513  29.655  60.464  1.000 31.05
ANISOU 1537 C   ARG  218 7353     1949    2496    -448  -1823 197
ATOM   1538 O   ARG  218 14.114  29.533  59.295  1.000 40.40
ANISOU 1538 O   ARG  218 9873     2241    3235    531   -3168 -627
ATOM   1539 N   PRO  219 14.246  30.747  61.157  1.000 30.01
ANISOU 1539 N   PRO  219 6290     2559    2555    -499  -1839 -284
ATOM   1540 CD  PRO  219 14.597  31.043  62.543  1.000 36.79
ANISOU 1540 CD  PRO  219 8147     2878    2954    -1848 -2548 -374
ATOM   1541 CA  PRO  219 13.464  31.841  60.549  1.000 26.34
ANISOU 1541 CA  PRO  219 4421     2564    3025    -573  -988 -340
ATOM   1542 CB  PRO  219 13.523  32.993  61.563  1.000 32.44
ANISOU 1542 CB  PRO  219 5361     2891    4073    -691  -417 -989
ATOM   1543 CG  PRO  219 13.947  32.372  62.825  1.000 38.75
ANISOU 1543 CG  PRO  219 7916     3462    3344    -1981 -958 -1235
ATOM   1544 C   PRO  219 14.005  32.329  59.220  1.000 23.64
ANISOU 1544 C   PRO  219 3472     2066    3443    -161  -1028 109
ATOM   1545 O   PRO  219 13.300  32.950  58.412  1.000 30.61
ANISOU 1545 O   PRO  219 4358     2934    4339    -347  -1712 876
ATOM   1546 N   ASP  220 15.269  32.087  58.906  1.000 25.98
ANISOU 1546 N   ASP  220 3611     1756    4506    -389  -644 -815
ATOM   1547 CA  ASP  220 15.847  32.660  57.705  1.000 27.96
ANISOU 1547 CA  ASP  220 3951     1603    5071    -364  30 -824
ATOM   1548 CB  ASP  220 17.212  33.238  58.155  1.000 29.61
ANISOU 1548 CB  ASP  220 3549     3142    4558    -176  -326 176
ATOM   1549 CG  ASP  220 18.091  32.158  58.780  1.000 32.09
ANISOU 1549 CG  ASP  220 3706     3527    4961    625   978  615
ATOM   1550 OD1 ASP  220 17.697  31.434  59.719  1.000 26.12
ANISOU 1550 OD1 ASP  220 3013     3522    3390    -158  -289 -97
ATOM   1551 OD2 ASP  220 19.241  32.088  58.281  1.000 29.09
ANISOU 1551 OD2 ASP  220 3714     3756    3581    304   677  -712
ATOM   1552 C   ASP  220 16.037  31.726  56.525  1.000 25.26
ANISOU 1552 C   ASP  220 2508     1291    5800    354   1110 -822
ATOM   1553 O   ASP  220 16.641  32.095  55.515  1.000 28.28
ANISOU 1553 O   ASP  220 4088     1665    4994    -855  298  -434
ATOM   1554 N   ALA  221 15.500  30.510  56.631  1.000 21.58
ANISOU 1554 N   ALA  221 2748     1770    3681    -288  178  -651
ATOM   1555 CA  ALA  221 15.840  29.484  55.658  1.000 19.81
ANISOU 1555 CA  ALA  221 2986     1452    3090    -342  -224 -315
ATOM   1556 CB  ALA  221 17.130  28.800  56.109  1.000 19.51
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ANISOU 1556 CB  ALA  221 2267    1497    3647    -648  45 -746
ATOM   1557 C   ALA  221 14.718  28.469  55.489  1.000 17.71
ANISOU 1557 C   ALA  221 2304    1912    2512    -251  -75 -309
ATOM   1558 O   ALA  221 13.866  28.356  56.380  1.000 20.97
ANISOU 1558 O   ALA  221 3596    2029    2344    -503  406 -284
ATOM   1559 N   VAL  222 14.728  27.756  54.378  1.000 14.22
ANISOU 1559 N   VAL  222 1560    1582    2262    -76   -92  -11
ATOM   1560 CA  VAL  222 13.823  26.617  54.160  1.000 14.89
ANISOU 1560 CA  VAL  222 1326    1608    2723    98 -216  -205
ATOM   1561 CB  VAL  222 13.079  26.779  52.830  1.000 17.28
ANISOU 1561 CB  VAL  222 1680    1754    3133    90 -657  -144
ATOM   1562 CG1 VAL  222 13.995  26.685  51.620  1.000 19.17
ANISOU 1562 CG1 VAL  222 1974    2625    2686    -446  -775 150
ATOM   1563 CG2 VAL  222 11.996  25.747  52.641  1.000 17.36
ANISOU 1563 CG2 VAL  222 2185    1879    2533    -254  -362 -385
ATOM   1564 C   VAL  222 14.653  25.339  54.263  1.000 12.66
ANISOU 1564 C   VAL  222 1136    1564    2112    -50   -225 -378
ATOM   1565 O   VAL  222 15.828  25.320  53.893  1.000 13.12
ANISOU 1565 O   VAL  222 1280    1825    1881    104   -13  -199
ATOM   1566 N   LEU  223 14.049  24.267  54.775  1.000 12.98
ANISOU 1566 N   LEU  223 1123    1538    2270    -163  -370 -417
ATOM   1567 CA  LEU  223 14.681  22.952  54.749  1.000 10.70
ANISOU 1567 CA  LEU  223 891 1704    1472    -26   -98  -7
ATOM   1568 CB  LEU  223 14.276  22.130  55.961  1.000 13.02
ANISOU 1568 CB  LEU  223 1387    1968    1593    -419  289  -108
ATOM   1569 CG  LEU  223 14.739  20.683  56.106  1.000 17.41
ANISOU 1569 CG  LEU  223 2434    2132    2050    -290  -476 566
ATOM   1570 CD1 LEU  223 16.247  20.614  56.204  1.000 17.20
ANISOU 1570 CD1 LEU  223 2576    1518    2441    26 -989  -249
ATOM   1571 CD2 LEU  223 13.983  20.076  57.282  1.000 33.63
ANISOU 1571 CD2 LEU  223 3981    4721    4077    -341  134  2949
ATOM   1572 C   LEU  223 14.362  22.211  53.456  1.000 10.02
ANISOU 1572 C   LEU  223 1000    1265    1543    58 -319  88
ATOM   1573 O   LEU  223 13.206  22.160  53.088  1.000 12.86
ANISOU 1573 O   LEU  223 949 1945    1992    -97   -174  -372
ATOM   1574 N   VAL  224 15.406  21.675  52.798  1.000 10.55
ANISOU 1574 N   VAL  224 978 1070    1962    -76   -418  -382
ATOM   1575 CA  VAL  224 15.227  20.932  51.553  1.000 11.98
ANISOU 1575 CA  VAL  224 1376    1288    1887    -249  -278 -372
ATOM   1576 CB  VAL  224 16.095  21.461  50.391  1.000 11.23
ANISOU 1576 CB  VAL  224 901 1541    1824    -279  -622  -99
ATOM   1577 CG1 VAL  224 15.833  20.690  49.102  1.000 13.16
ANISOU 1577 CG1 VAL  224 1899    1485    1615    -462  -516 84
ATOM   1578 CG2 VAL  224 15.837  22.941  50.156  1.000 13.86
ANISOU 1578 CG2 VAL  224 1480    1520    2266    -135  -354 -64
ATOM   1579 C   VAL  224 15.539  19.450  51.786  1.000 10.87
ANISOU 1579 C   VAL  224 953 1275    1901    -13   342 -484
ATOM   1580 O   VAL  224 16.646  19.148  52.201  1.000 12.57
ANISOU 1580 O   VAL  224 1283    1363    2132    -175  -154 -274
ATOM   1581 N   PHE  225 14.585  18.553  51.533  1.000 11.86
ANISOU 1581 N   PHE  225 1241    1128    2137    -15   -303 -61
ATOM   1582 CA  PHE  225 14.811  17.130  51.412  1.000 11.38
ANISOU 1582 CA  PHE  225 1260    1157    1909    -22   -67  -56
ATOM   1583 CB  PHE  225 13.707  16.280  52.044  1.000 11.34
ANISOU 1583 CB  PHE  225 1117    1176    2015    205  -213 335
ATOM   1584 CG  PHE  225 13.654  16.172  53.544  1.000 11.38
ANISOU 1584 CG  PHE  225 964 1369    1991    -251  -333  181
ATOM   1585 CD1 PHE  225 14.685  15.653  54.291  1.000 15.28
ANISOU 1585 CD1 PHE  225 1771    1777    2256    -98   -853 298
ATOM   1586 CD2 PHE  225 12.532  16.576  54.254  1.000 17.91
ANISOU 1586 CD2 PHE  225 1904    2748    2153    341   106  0
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ATOM   1587 CE1 PHE  225 14.619  15.535  55.661 1.000 17.46
ANISOU 1587 CE1 PHE  225 2449    1862    2321    -249  -795 6 6 6
ATOM   1588 CE2 PHE  225 12.447  16.474  55.612 1.000 19.35
ANISOU 1588 CE2 PHE  225 2563    2678    2111    121   129  - 1 1
ATOM   1589 CZ  PHE  225 13.499  15.945  56.341 1.000 18.20
ANISOU 1589 CZ  PHE  225 2952    1641    2324    -501  -470 3  6
ATOM   1590 C   PHE  225 14.907  16.774  49.927 1.000 12.03
ANISOU 1590 C   PHE  225 1480    1285    1804    130   -201 4  2
ATOM   1591 O   PHE  225 14.019  17.160  49.163 1.000 12.77
ANISOU 1591 O   PHE  225 1473    1466    1912    341   -118 3  8
ATOM   1592 N   CYS  226 15.940  16.032  49.521 1.000 9.62
ANISOU 1592 N   CYS  226 954 1403     1296   -204  -407  2  9
ATOM   1593 CA  CYS  226 15.917  15.400  48.197 1.000 10.80
ANISOU 1593 CA  CYS  226 1432    1204    1468    -258  -310 - 5 9
ATOM   1594 CB  CYS  226 17.337  15.029  47.744 1.000 12.02
ANISOU 1594 CB  CYS  226 1539    1362    1666    -357  16 - 1 2 5
ATOM   1595 SG  CYS  226 18.426  16.490  47.554 1.000 13.74
ANISOU 1595 SG  CYS  226 1627    1400    2192    -341  18 1 3 9
ATOM   1596 C   CYS  226 14.998  14.178  48.256 1.000 9.86
ANISOU 1596 C   CYS  226 1190    1061    1495    -20   -293 - 1 6
ATOM   1597 O   CYS  226 15.015  13.431  49.252 1.000 11.17
ANISOU 1597 O   CYS  226 1181    1280    1781    -129  -435 2 7 2
ATOM   1598 N   GLY  227 14.217  13.963  47.205 1.000 10.17
ANISOU 1598 N   GLY  227 1428    1010    1427    -258  -271 - 3 5
ATOM   1599 CA  GLY  227 13.370  12.806  47.053 1.000 9.73
ANISOU 1599 CA  GLY  227 1231    860  1604    -178  -74 - 3 7
ATOM   1600 C   GLY  227 13.908  11.769  46.074 1.000 9.48
ANISOU 1600 C   GLY  227 1438    717  1445    16  -35   1 6 9
ATOM   1601 O   GLY  227 14.935  11.961  45.402 1.000 9.86
ANISOU 1601 O   GLY  227 1321    1137    1290    -104  -179 7  8
ATOM   1602 N   ALA  228 13.217  10.631  45.971 1.000 9.17
ANISOU 1602 N   ALA  228 1279    729  1477    109   -135  5  8
ATOM   1603 CA  ALA  228 13.650  9.529   45.108 1.000 9.41
ANISOU 1603 CA  ALA  228 1315    887  1371    9   -74   - 5 2
ATOM   1604 CB  ALA  228 12.727  8.296   45.256 1.000 10.50
ANISOU 1604 CB  ALA  228 2011    824  1155    -143  124 1 0 1
ATOM   1605 C   ALA  228 13.712  9.918   43.637 1.000 9.25
ANISOU 1605 C   ALA  228 1343    666  1507    -108  90 1 3 9
ATOM   1606 O   ALA  228 14.493  9.305   42.895 1.000 9.48
ANISOU 1606 O   ALA  228 1171    1026    1405    -88   -50  9  0
ATOM   1607 N   ILE  229 12.970  10.907  43.143 1.000 10.30
ANISOU 1607 N   ILE  229 1402    1004    1509    18 25 1 7 7
ATOM   1608 CA  ILE  229 13.074  11.311  41.727 1.000 10.87
ANISOU 1608 CA  ILE  229 1197    1446    1487    -2 -159  2 5 1
ATOM   1609 CB  ILE  229 11.802  12.078  41.295 1.000 11.52
ANISOU 1609 CB  ILE  229 1257    1473    1647    34 -57 3 6 2
ATOM   1610 CG2 ILE  229 11.997  12.852  39.999 1.000 11.30
ANISOU 1610 CG2 ILE  229 1655    1211    1426    83 -189  1 5 6
ATOM   1611 CG1 ILE  229 10.575  11.131  41.237 1.000 14.39
ANISOU 1611 CG1 ILE  229 1031    2034    2402    -40   210  3 1 1
ATOM   1612 CD1 ILE  229 10.676  10.093  40.138 1.000 19.20
ANISOU 1612 CD1 ILE  229 2085    1723    3489    -610  93 - 1 3 8
ATOM   1613 C   ILE  229 14.389  12.034  41.477 1.000 10.38
ANISOU 1613 C   ILE  229 1293    1405    1247    -62   -169 3 2 2
ATOM   1614 O   ILE  229 14.952  11.947  40.369 1.000 11.66
ANISOU 1614 O   ILE  229 1805    1257    1368    -13   145  3 2 8
ATOM   1615 N   ALA  230 14.965  12.692  42.490 1.000 10.66
ANISOU 1615 N   ALA  230 1476    1274    1300    -104  -151 3 5 6
ATOM   1616 CA  ALA  230 16.312  13.259  42.338 1.000 11.21
ANISOU 1616 CA  ALA  230 1473    975  1813    -57   -308  9  0
ATOM   1617 CB  ALA  230 16.681  14.148  43.509 1.000 10.58
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ANISOU 1617 CB  ALA 230 1350    1295   1375   62 -106  1 2 6
ATOM   1618 C   ALA 230 17.336  12.136 42.132 1.000 11.28
ANISOU 1618 C   ALA 230 1640    1037   1610   1  55 2 4 2
ATOM   1619 O   ALA 230 18.220  12.185 41.273 1.000 11.29
ANISOU 1619 O   ALA 230 1510    1240   1539   -189  -40  2 8 8
ATOM   1620 N   THR 231 17.173  11.097 42.946 1.000 10.55
ANISOU 1620 N   THR 231 1328    894  1787   -262  -70 2 1 4
ATOM   1621 CA  THR 231 18.064  9.939  42.819 1.000 11.98
ANISOU 1621 CA  THR 231 1929    1018   1605   0  -164  1 5 9
ATOM   1622 CB  THR 231 17.717  8.865  43.878 1.000 10.76
ANISOU 1622 CB  THR 231 1381    1070   1636   -86   -453 2 4 6
ATOM   1623 OG1 THR 231 17.658  9.437  45.198 1.000 11.82
ANISOU 1623 OG1 THR 231 1615    1236   1641   35 -115  2 7 7
ATOM   1624 CG2 THR 231 18.765  7.752  43.880 1.000 12.57
ANISOU 1624 CG2 THR 231 1621    1314   1840   160   -89  3 5 1
ATOM   1625 C   THR 231 17.958  9.352  41.415 1.000 12.52
ANISOU 1625 C   THR 231 1632    1500   1624   -145  42 1 1
ATOM   1626 O   THR 231 18.939  9.050  40.732 1.000 12.15
ANISOU 1626 O   THR 231 1636    1233   1747   -17   86 2 2 4
ATOM   1627 N   LEU 232 16.717  9.154  40.959 1.000 11.14
ANISOU 1627 N   LEU 232 1608    1005   1620   90 -68 1 4 1
ATOM   1628 CA  LEU 232 16.446  8.522  39.675 1.000 12.47
ANISOU 1628 CA  LEU 232 1880    1203   1657   109   -169 4 5
ATOM   1629 CB  LEU 232 14.950  8.214  39.552 1.000 12.81
ANISOU 1629 CB  LEU 232 1989    1225   1654   -78   -209 1 9
ATOM   1630 CG  LEU 232 14.452  7.464  38.314 1.000 14.85
ANISOU 1630 CG  LEU 232 2171    1753   1719   -5 -410  - 9 6
ATOM   1631 CD1 LEU 232 15.020  6.055  38.240 1.000 16.78
ANISOU 1631 CD1 LEU 232 2693    1749   1932   72 -431  - 4 8 7
ATOM   1632 CD2 LEU 232 12.914  7.411  38.291 1.000 15.70
ANISOU 1632 CD2 LEU 232 2180    1866   1920   -278  -589 4 9 4
ATOM   1633 C   LEU 232 16.964  9.354  38.511 1.000 11.58
ANISOU 1633 C   LEU 232 1452    1390   1559   309   -301 1 3 6
ATOM   1634 O   LEU 232 17.752  8.837  37.686 1.000 13.45
ANISOU 1634 O   LEU 232 1808    1436   1867   320   -17  3  0
ATOM   1635 N   VAL 233 16.565  10.617 38.414 1.000 10.95
ANISOU 1635 N   VAL 233 1428    1210   1522   -14   -210 0
ATOM   1636 CA  VAL 233 16.948  11.421 37.242 1.000 11.70
ANISOU 1636 CA  VAL 233 1703    1345   1397   97 5  1 3
ATOM   1637 CB  VAL 233 16.156  12.743 37.215 1.000 11.14
ANISOU 1637 CB  VAL 233 1672    1272   1287   -26   276  7 3
ATOM   1638 CG1 VAL 233 16.661  13.774 38.249 1.000 13.34
ANISOU 1638 CG1 VAL 233 1834    1562   1673   -205  653  - 3 6 8
ATOM   1639 CG2 VAL 233 16.106  13.412 35.827 1.000 14.66
ANISOU 1639 CG2 VAL 233 1992    1873   1704   -4 -45 5 8 6
ATOM   1640 C   VAL 233 18.459  11.586 37.132 1.000 13.41
ANISOU 1640 C   VAL 233 1712    1573   1811   91 151 1 2 5
ATOM   1641 O   VAL 233 19.012  11.627 36.021 1.000 13.45
ANISOU 1641 O   VAL 233 1844    1402   1866   46 192 4 3 8
ATOM   1642 N   THR 234 19.188  11.665 38.250 1.000 13.13
ANISOU 1642 N   THR 234 1457    1639   1893   -139  223  1 2 6
ATOM   1643 CA  THR 234 20.613  11.930 38.244 1.000 13.00
ANISOU 1643 CA  THR 234 1483    1600   1855   -188  428  1 4 3
ATOM   1644 CB  THR 234 21.069  12.726 39.465 1.000 12.46
ANISOU 1644 CB  THR 234 1300    1632   1803   -32   200  2 5 1
ATOM   1645 OG1 THR 234 20.825  11.941 40.639 1.000 13.71
ANISOU 1645 OG1 THR 234 1660    1662   1888   192   202  2 9 1
ATOM   1646 CG2 THR 234 20.301  14.027 39.643 1.000 11.37
ANISOU 1646 CG2 THR 234 1097    1565   1657   -153  -87  1 6 9
ATOM   1647 C   THR 234 21.424  10.643 38.178 1.000 14.44
ANISOU 1647 C   THR 234 1550    1823   2114   6  -73 - 5 3
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ATOM   1648 O   THR 234 22.659 10.710 38.233 1.000 15.81
ANISOU 1648 O   THR 234 1546  2169  2293   61 27 2 1 7
ATOM   1649 N   GLY 235 20.767 9.477 38.070 1.000 14.76
ANISOU 1649 N   GLY 235 1776  1576  2254   77 81 4 1 0
ATOM   1650 CA  GLY 235 21.530 8.249 37.994 1.000 16.69
ANISOU 1650 CA  GLY 235 2053  1803  2486   304  35 1 8 9
ATOM   1651 C   GLY 235 22.243 7.862 39.275 1.000 16.83
ANISOU 1651 C   GLY 235 1854  2031  2512   765  244  1 9 3
ATOM   1652 O   GLY 235 23.305 7.237 39.194 1.000 19.67
ANISOU 1652 O   GLY 235 2074  2172  3225   1035 383  3 7 2
ATOM   1653 N   GLY 236 21.665 8.227 40.425 1.000 14.46
ANISOU 1653 N   GLY 236 1732  1327  2433   154  198  7  5
ATOM   1654 CA  GLY 236 22.187 7.768 41.692 1.000 15.73
ANISOU 1654 CA  GLY 236 2060  1381  2536   41 186 3 1 2
ATOM   1655 C   GLY 236 23.166 8.691 42.388 1.000 14.76
ANISOU 1655 C   GLY 236 1931  1332  2346   252  73 2 8 8
ATOM   1656 O   GLY 236 23.778 8.244 43.373 1.000 18.32
ANISOU 1656 O   GLY 236 1983  2197  2782   106  -105 8 4 4
ATOM   1657 N   GLN 237 23.318 9.938 41.953 1.000 13.99
ANISOU 1657 N   GLN 237 1831  1349  2137   158  165  1 7 0
ATOM   1658 CA  GLN 237 24.209 10.956 42.485 1.000 13.13
ANISOU 1658 CA  GLN 237 1474  1304  2210   367  -31  2 7 6
ATOM   1659 CB  GLN 237 24.629 11.948 41.383 1.000 13.38
ANISOU 1659 CB  GLN 237 1367  1566  2151   99 72 1 5 9
ATOM   1660 CG  GLN 237 25.390 11.335 40.219 1.000 14.74
ANISOU 1660 CG  GLN 237 1404  1529  2666   518  410  3 3 3
ATOM   1661 CD  GLN 237 25.816 12.428 39.257 1.000 17.22
ANISOU 1661 CD  GLN 237 2039  2018  2486   -64  426  3 6 0
ATOM   1662 OE1 GLN 237 26.754 13.208 39.522 1.000 20.60
ANISOU 1662 OE1 GLN 237 1566  2334  3928   -10  -29  9 6 5
ATOM   1663 NE2 GLN 237 25.116 12.470 38.127 1.000 17.47
ANISOU 1663 NE2 GLN 237 2014  2093  2533   208  438  4 0 8
ATOM   1664 C   GLN 237 23.627 11.739 43.663 1.000 12.90
ANISOU 1664 C   GLN 237 1474  1324  2104   72 -10 2 5 5
ATOM   1665 O   GLN 237 24.332 12.549 44.282 1.000 15.90
ANISOU 1665 O   GLN 237 1739  1888  2413   -291  74 - 8 4
ATOM   1666 N   VAL 238 22.365 11.481 44.013 1.000 12.13
ANISOU 1666 N   VAL 238 1372  962  2276   212  -33 2 0 0
ATOM   1667 CA  VAL 238 21.664 12.182 45.082 1.000 11.91
ANISOU 1667 CA  VAL 238 1169  1436  1920   -121 -276 - 1 9
ATOM   1668 CB  VAL 238 20.622 13.158 44.510 1.000 12.00
ANISOU 1668 CB  VAL 238 1024  1179  2357   -6 199 - 3 1
ATOM   1669 CG1 VAL 238 19.978 13.999 45.601 1.000 13.07
ANISOU 1669 CG1 VAL 238 1530  1668  1767   63 -232  - 2 2 2
ATOM   1670 CG2 VAL 238 21.207 14.088 43.463 1.000 14.00
ANISOU 1670 CG2 VAL 238 1795  1470  2053   -40  -2 1 8 1
ATOM   1671 C   VAL 238 20.990 11.156 46.000 1.000 13.62
ANISOU 1671 C   VAL 238 1707  1415  2054   -103 -40  - 2 2
ATOM   1672 O   VAL 238 20.252 10.288 45.492 1.000 12.64
ANISOU 1672 O   VAL 238 1702  977  2123   60 -318  2 5 7
ATOM   1673 N   LYS 239 21.247 11.246 47.300 1.000 11.99
ANISOU 1673 N   LYS 239 1075  1404  2076   127  -101 7  4
ATOM   1674 CA  LYS 239 20.568 10.444 48.322 1.000 12.77
ANISOU 1674 CA  LYS 239 1224  1541  2088   -12  -124 8  6
ATOM   1675 CB  LYS 239 21.382 10.463 49.622 1.000 12.23
ANISOU 1675 CB  LYS 239 1333  1155  2158   183  -234 - 2 8
ATOM   1676 CG  LYS 239 20.953 9.626 50.793 1.000 13.85
ANISOU 1676 CG  LYS 239 1643  1689  1931   187  -52  - 8 9
ATOM   1677 CD  LYS 239 21.927 9.579 51.957 1.000 20.13
ANISOU 1677 CD  LYS 239 2893  1795  2961   10 -1185 5 8 8
ATOM   1678 CE  LYS 239 21.364 8.745 53.098 1.000 24.73
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ANISOU	1678	CE	LYS	239	4065	2250	3080	-348	-1466	1064
ATOM	1679	NZ	LYS	239	22.019	8.841	54.420	1.000	32.28	
ANISOU	1679	NZ	LYS	239	5658	4315	2293	1610	-930	-304
ATOM	1680	C	LYS	239	19.169	10.949	48.661	1.000	11.59	
ANISOU	1680	C	LYS	239	1207	1332	1866	-35	-82	64
ATOM	1681	O	LYS	239	18.976	12.191	48.708	1.000	12.32	
ANISOU	1681	O	LYS	239	1638	1294	1749	-2	-25	236
ATOM	1682	N	ALA	240	18.222	10.047	48.863	1.000	10.65	
ANISOU	1682	N	ALA	240	1248	1266	1534	-52	-185	-88
ATOM	1683	CA	ALA	240	16.884	10.368	49.354	1.000	10.21	
ANISOU	1683	CA	ALA	240	1292	1057	1531	-195	-37	-109
ATOM	1684	CB	ALA	240	15.784	9.782	48.466	1.000	13.46	
ANISOU	1684	CB	ALA	240	1195	2378	1543	-232	20	-403
ATOM	1685	C	ALA	240	16.784	9.881	50.807	1.000	10.97	
ANISOU	1685	C	ALA	240	1308	1249	1611	-127	-142	49
ATOM	1686	O	ALA	240	16.595	8.664	51.059	1.000	13.02	
ANISOU	1686	O	ALA	240	2136	1242	1568	-243	28	-7
ATOM	1687	N	PRO	241	16.967	10.783	51.782	1.000	11.13	
ANISOU	1687	N	PRO	241	1723	1041	1466	160	-49	138
ATOM	1688	CD	PRO	241	17.172	12.237	51.654	1.000	11.17	
ANISOU	1688	CD	PRO	241	1419	1204	1618	-180	-128	76
ATOM	1689	CA	PRO	241	17.043	10.340	53.166	1.000	11.96	
ANISOU	1689	CA	PRO	241	1597	1447	1499	-172	-32	193
ATOM	1690	CB	PRO	241	17.712	11.545	53.891	1.000	14.25	
ANISOU	1690	CB	PRO	241	1875	1837	1701	-531	-383	242
ATOM	1691	CG	PRO	241	17.286	12.724	53.069	1.000	13.61	
ANISOU	1691	CG	PRO	241	2015	1446	1709	-596	-465	-22
ATOM	1692	C	PRO	241	15.708	10.072	53.861	1.000	12.35	
ANISOU	1692	C	PRO	241	1417	1610	1665	-175	-187	418
ATOM	1693	O	PRO	241	14.759	10.829	53.655	1.000	12.28	
ANISOU	1693	O	PRO	241	1359	1582	1723	-232	-468	81
ATOM	1694	N	ARG	242	15.700	9.033	54.711	1.000	12.75	
ANISOU	1694	N	ARG	242	1775	1407	1664	-170	76	250
ATOM	1695	CA	ARG	242	14.563	8.804	55.576	1.000	10.76	
ANISOU	1695	CA	ARG	242	1292	1417	1380	-207	-281	211
ATOM	1696	CB	ARG	242	14.614	7.405	56.223	1.000	15.02	
ANISOU	1696	CB	ARG	242	2419	1368	1918	-357	117	294
ATOM	1697	CG	ARG	242	14.115	6.342	55.230	1.000	17.85	
ANISOU	1697	CG	ARG	242	3373	1274	2135	9	-560	251
ATOM	1698	CD	ARG	242	14.254	4.934	55.763	1.000	19.42	
ANISOU	1698	CD	ARG	242	3148	1111	3120	506	503	116
ATOM	1699	NE	ARG	242	15.667	4.552	55.849	1.000	20.71	
ANISOU	1699	NE	ARG	242	3225	2107	2538	938	638	212
ATOM	1700	CZ	ARG	242	16.107	3.444	56.416	1.000	23.22	
ANISOU	1700	CZ	ARG	242	3198	2206	3417	307	-544	589
ATOM	1701	NH1	ARG	242	15.285	2.567	56.980	1.000	24.46	
ANISOU	1701	NH1	ARG	242	4097	2112	3083	307	387	195
ATOM	1702	NH2	ARG	242	17.416	3.184	56.438	1.000	25.41	
ANISOU	1702	NH2	ARG	242	3402	2332	3921	819	-267	403
ATOM	1703	C	ARG	242	14.477	9.834	56.704	1.000	11.95	
ANISOU	1703	C	ARG	242	1571	1463	1506	-248	-214	107
ATOM	1704	O	ARG	242	15.469	10.377	57.213	1.000	13.65	
ANISOU	1704	O	ARG	242	1708	1439	2040	-322	-401	-38
ATOM	1705	N	HIS	243	13.252	10.085	57.118	1.000	11.60	
ANISOU	1705	N	HIS	243	1657	1410	1342	-311	-206	5
ATOM	1706	CA	HIS	243	12.942	11.056	58.158	1.000	11.49	
ANISOU	1706	CA	HIS	243	1855	1571	938	-306	-183	140
ATOM	1707	CB	HIS	243	12.968	12.462	57.546	1.000	11.22	
ANISOU	1707	CB	HIS	243	1432	1379	1453	-231	-221	3 9
ATOM	1708	CG	HIS	243	12.133	12.694	56.341	1.000	11.80	
ANISOU	1708	CG	HIS	243	1937	1171	1378	-31	-268	7 9

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ATOM   1709 CD2 HIS  243 10.885  13.236  56.181 1.000 11.15
ANISOU 1709 CD2 HIS  243 1990    1106    1142    35 -344  141
ATOM   1710 ND1 HIS  243 12.538  12.345  55.086 1.000 12.29
ANISOU 1710 ND1 HIS  243 1670    1606    1395    -394  -91  8
ATOM   1711 CE1 HIS  243 11.599  12.653  54.209 1.000 12.59
ANISOU 1711 CE1 HIS  243 1686    1740    1357    -522  -202 -253
ATOM   1712 NE2 HIS  243 10.585  13.204  54.841 1.000 10.77
ANISOU 1712 NE2 HIS  243 1612    1307    1172    -616  -268 -36
ATOM   1713 C   HIS  243 11.605  10.737  58.812 1.000 12.49
ANISOU 1713 C   HIS  243 1869    1570    1308    -321  -53  73
ATOM   1714 O   HIS  243 10.807  9.949   58.271 1.000 12.26
ANISOU 1714 O   HIS  243 1756    1404    1497    -188  -115 47
ATOM   1715 N   HIS  244 11.352  11.319  59.983 1.000 12.16
ANISOU 1715 N   HIS  244 1464    1715    1442    -230  -112 -32
ATOM   1716 CA  HIS  244 10.138  11.043  60.758 1.000 12.02
ANISOU 1716 CA  HIS  244 1606    1809    1152    -599  -167 -24
ATOM   1717 CB  HIS  244 10.255  9.778   61.615 1.000 12.51
ANISOU 1717 CB  HIS  244 1655    1763    1334    -19   101  -47
ATOM   1718 CG  HIS  244 11.270  9.810   62.698 1.000 15.04
ANISOU 1718 CG  HIS  244 2025    1723    1965    -178  -433 154
ATOM   1719 CD2 HIS  244 11.276  10.380  63.923 1.000 18.19
ANISOU 1719 CD2 HIS  244 2946    2339    1627    36 -732  297
ATOM   1720 ND1 HIS  244 12.504  9.203   62.662 1.000 19.30
ANISOU 1720 ND1 HIS  244 2303    2232    2800    229   -708 266
ATOM   1721 CE1 HIS  244 13.226  9.387   63.731 1.000 22.48
ANISOU 1721 CE1 HIS  244 2649    2734    3159    11  -1206 650
ATOM   1722 NE2 HIS  244 12.476  10.120  64.531 1.000 22.33
ANISOU 1722 NE2 HIS  244 3088    2895    2500    -272  -1236 384
ATOM   1723 C   HIS  244 9.780   12.246  61.613 1.000 13.47
ANISOU 1723 C   HIS  244 1897    1673    1549    -362  254  67
ATOM   1724 O   HIS  244 10.603  13.165  61.798 1.000 13.48
ANISOU 1724 O   HIS  244 1800    1726    1595    -283  139  -161
ATOM   1725 N   VAL  245 8.551   12.245  62.130 1.000 15.26
ANISOU 1725 N   VAL  245 1852    1964    1983    -417  232  -55
ATOM   1726 CA  VAL  245 8.090   13.352  62.970 1.000 17.31
ANISOU 1726 CA  VAL  245 2108    2442    2026    -125  476  -161
ATOM   1727 CB  VAL  245 6.939   14.169  62.360 1.000 17.33
ANISOU 1727 CB  VAL  245 2094    2473    2019    -80   340  -477
ATOM   1728 CG1 VAL  245 6.551   15.334  63.286 1.000 25.25
ANISOU 1728 CG1 VAL  245 2217    2966    4410    -137  1939 -1248
ATOM   1729 CG2 VAL  245 7.252   14.713  60.966 1.000 21.49
ANISOU 1729 CG2 VAL  245 3070    2538    2556    -180  313  271
ATOM   1730 C   VAL  245 7.682   12.768  64.327 1.000 18.29
ANISOU 1730 C   VAL  245 2123    2689    2137    -443  508  -71
ATOM   1731 O   VAL  245 6.765   11.945  64.429 1.000 18.62
ANISOU 1731 O   VAL  245 1810    2174    3089    -15   451  254
ATOM   1732 N   ALA  246 8.385   13.202  65.369 1.000 21.54
ANISOU 1732 N   ALA  246 2813    3045    2327    -591  -407 907
ATOM   1733 CA  ALA  246 8.133   12.701  66.719 1.000 25.10
ANISOU 1733 CA  ALA  246 4596    2562    2379    94 -225  997
ATOM   1734 CB  ALA  246 9.424   12.723  67.537 1.000 29.82
ANISOU 1734 CB  ALA  246 5381    3408    2540    402   -889 1325
ATOM   1735 C   ALA  246 7.080   13.545  67.412 1.000 31.20
ANISOU 1735 C   ALA  246 5079    4143    2632    314   280  428
ATOM   1736 O   ALA  246 6.876   14.714  67.052 1.000 32.39
ANISOU 1736 O   ALA  246 4706    3748    3853    567   1247 -66
ATOM   1737 N   ALA  247 6.429   12.973  68.413 1.000 37.30
ANISOU 1737 N   ALA  247 5548    5498    3126    92  640  835
ATOM   1738 CA  ALA  247 5.585   13.794  69.271 1.000 40.42
ANISOU 1738 CA  ALA  247 5434    6048    3878    15 1313  850
ATOM   1739 C   ALA  247 6.289   14.132  70.578 1.000 42.17
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ANISOU 1739  C   ALA 247  6495  5891  3636  -823  1720  3  4  1
ATOM   1740  O   ALA 247  7.048 13.338 71.136 1.000 41.63
ANISOU 1740  O   ALA 247  5811  6371  3637 -1631  804  4  2  5
ATOM   1741  CB  ALA 247  4.280 13.067 69.525 1.000 47.17
ANISOU 1741  CB  ALA 247  5186  9059  3676  -520  523  2  6  8  3
ATOM   1742  N   SER 257  1.781 21.848 70.382 1.000 31.02
ANISOU 1742  N   SER 257  4109  5558  2119   137 -235 -8  1  0
ATOM   1743  CA  SER 257  1.214 21.932 69.052 1.000 27.01
ANISOU 1743  CA  SER 257  2792  5165  2304   109 -143 -7  0  7
ATOM   1744  CB  SER 257  0.039 22.914 68.992 1.000 28.16
ANISOU 1744  CB  SER 257  2655  4473  3572  -238  -90 -10  7  1
ATOM   1745  OG  SER 257  0.491 24.251 69.074 1.000 51.32
ANISOU 1745  OG  SER 257  8516  4131  6853  -616 -2734 -8  0  7
ATOM   1746  C   SER 257  2.259 22.389 68.034 1.000 26.19
ANISOU 1746  C   SER 257  2537  5064  2350  -132 -413 -5  2  7
ATOM   1747  O   SER 257  3.286 22.988 68.352 1.000 31.47
ANISOU 1747  O   SER 257  2740  5886  3330  -435 -689 -6  3  9
ATOM   1748  N   ARG 258  2.022 22.123 66.763 1.000 26.04
ANISOU 1748  N   ARG 258  3257  4477  2161  -238 -441 -1  9
ATOM   1749  CA  ARG 258  2.982 22.541 65.747 1.000 25.81
ANISOU 1749  CA  ARG 258  2606  4735  2466    73 -338  -1  9  7
ATOM   1750  C   ARG 258  2.321 22.609 64.383 1.000 18.26
ANISOU 1750  C   ARG 258  2374  2541  2021   39  83 -8  5  4
ATOM   1751  O   ARG 258  1.288 21.967 64.131 1.000 19.23
ANISOU 1751  O   ARG 258  2600  2819  1888  -389  311 -4  2  0
ATOM   1752  CB  ARG 258  4.188 21.592 65.664 1.000 29.78
ANISOU 1752  CB  ARG 258  3403  5052  2861   695 -552 -5  7
ATOM   1753  CG  ARG 258  4.246 20.784 64.384 1.000 32.64
ANISOU 1753  CG  ARG 258  4358  4148  3896   146   97 -5  6  1
ATOM   1754  CD  ARG 258  5.325 19.746 64.499 1.000 30.38
ANISOU 1754  CD  ARG 258  3812  4423  3309   -57  341  -1  6
ATOM   1755  NE  ARG 258  6.433 19.909 63.581 1.000 29.43
ANISOU 1755  NE  ARG 258  3990  4604  2588   -22   70  5  4  2
ATOM   1756  CZ  ARG 258  6.453 19.389 62.359 1.000 25.02
ANISOU 1756  CZ  ARG 258  2540  3893  3074   304 -243  1  0  4
ATOM   1757  NH1 ARG 258  5.456 18.677 61.835 1.000 22.88
ANISOU 1757  NH1 ARG 258  2105  2607  3982   359   315  2  8  9
ATOM   1758  NH2 ARG 258  7.523 19.593 61.617 1.000 22.03
ANISOU 1758  NH2 ARG 258  2477  2775  3120  -430 -287 -9  6  4
ATOM   1759  N   THR 259  2.927 23.415 63.527 1.000 20.17
ANISOU 1759  N   THR 259  2010  3640  2013   -743   91 -1  0  0  1
ATOM   1760  CA  THR 259  2.485 23.505 62.138 1.000 18.33
ANISOU 1760  CA  THR 259  1801  3043  2121   -533   43 -6  8  5
ATOM   1761  CB  THR 259  1.821 24.821 61.713 1.000 23.23
ANISOU 1761  CB  THR 259  2082  3169  3576   -384  -164 -5  8  0
ATOM   1762  OG1 THR 259  2.839 25.830 61.681 1.000 34.27
ANISOU 1762  OG1 THR 259  2181  2562  8277   -137  -996 -7  9  4
ATOM   1763  CG2 THR 259  0.738 25.198 62.704 1.000 25.49
ANISOU 1763  CG2 THR 259  4466  2233  2987   325   396  -9  4  8
ATOM   1764  C   THR 259  3.702 23.352 61.222 1.000 18.44
ANISOU 1764  C   THR 259  2035  2822  2150   -753   274  -5  8  3
ATOM   1765  O   THR 259  4.835 23.698 61.603 1.000 24.74
ANISOU 1765  O   THR 259  1961  5370  2069   -964   231  -7  1  4
ATOM   1766  N   SER 260  3.420 22.867 60.026 1.000 16.29
ANISOU 1766  N   SER 260  1971  2352  1864   -224   2  -7  5
ATOM   1767  CA  SER 260  4.447 22.832 58.989 1.000 17.43
ANISOU 1767  CA  SER 260  1783  2961  1879   321   -95  -7  2
ATOM   1768  CB  SER 260  5.224 21.514 58.956 1.000 20.17
ANISOU 1768  CB  SER 260  2306  3257  2100   762  -127  3  8  8
ATOM   1769  OG  SER 260  4.416 20.392 58.698 1.000 27.09
ANISOU 1769  OG  SER 260  3651  2803  3839   426   217  5  5  4
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ATOM   1770 C   SER 260 3.832   23.062 57.614 1.000 14.52
ANISOU 1770 C   SER 260 1463    2165   1889    83 -100  - 1
ATOM   1771 O   SER 260 2.686   22.681 57.402 1.000 15.92
ANISOU 1771 O   SER 260 1513    2489   2049   -93   -1 2 5 7
ATOM   1772 N   SER 261 4.617   23.660 56.742 1.000 13.45
ANISOU 1772 N   SER 261 1489    1832   1788   -190  -120 - 5 0 0
ATOM   1773 CA  SER 261 4.294   23.864 55.334 1.000 13.52
ANISOU 1773 CA  SER 261 1599    1726   1812   -204   30 - 3 1 5
ATOM   1774 C   SER 261 5.209   22.943 54.545 1.000 12.45
ANISOU 1774 C   SER 261 1332    1887   1513   -42   -240 - 1 6 1
ATOM   1775 O   SER 261 6.438   23.072 54.662 1.000 15.07
ANISOU 1775 O   SER 261 1344    1885   2497   -68   -331 - 3 4 3
ATOM   1776 CB  SER 261 4.446   25.330 54.943 1.000 17.76
ANISOU 1776 CB  SER 261 2718    1625   2404   -399  -485 - 3 1 8
ATOM   1777 OG  SER 261 4.428   25.554 53.570 1.000 27.54
ANISOU 1777 OG  SER 261 4342    3308   2814   -719  -821 9 5 5
ATOM   1778 N   VAL 262 4.623   22.045 53.782 1.000 10.90
ANISOU 1778 N   VAL 262 1215    1630   1299    41 -135  1 9
ATOM   1779 CA  VAL 262 5.393   21.031 53.026 1.000 11.61
ANISOU 1779 CA  VAL 262 1334    1634   1442    156  -103 1 7
ATOM   1780 CB  VAL 262 5.026   19.639 53.558 1.000 11.87
ANISOU 1780 CB  VAL 262 1262    1636   1614     9  -187  - 7 4
ATOM   1781 CG1 VAL 262 5.778   18.577 52.779 1.000 13.12
ANISOU 1781 CG1 VAL 262 1462    1527   1997   -2 185 5 1
ATOM   1782 CG2 VAL 262 5.262   19.564 55.062 1.000 17.08
ANISOU 1782 CG2 VAL 262 3390    1494   1604   -374  -245 3 9
ATOM   1783 C   VAL 262 5.096   21.149 51.543 1.000 11.18
ANISOU 1783 C   VAL 262 1026    1790   1431     1  -111  - 1 3 8
ATOM   1784 O   VAL 262 3.939   20.969 51.127 1.000 12.76
ANISOU 1784 O   VAL 262 1064    2137   1648   -251  -84  - 2 7 1
ATOM   1785 N   PHE 263 6.090   21.438 50.714 1.000 9.50
ANISOU 1785 N   PHE 263 995 1297     1316    -6 -210  - 1 8 1
ATOM   1786 CA  PHE 263 5.933   21.637 49.288 1.000 9.61
ANISOU 1786 CA  PHE 263 1310    1017   1324    -6 -284  - 4 2
ATOM   1787 CB  PHE 263 6.486   23.002 48.848 1.000 10.94
ANISOU 1787 CB  PHE 263 1282    1055   1821    -50   -253 4
ATOM   1788 CG  PHE 263 6.150   23.399 47.418 1.000 10.35
ANISOU 1788 CG  PHE 263 779 1231     1921   -58   32 3 4 0
ATOM   1789 CD1 PHE 263 6.858   22.915 46.326 1.000 9.98
ANISOU 1789 CD1 PHE 263 766 1183     1841   -26   -101  2 4 0
ATOM   1790 CD2 PHE 263 5.106   24.277 47.148 1.000 11.95
ANISOU 1790 CD2 PHE 263 1229    1261   2052   245   -29  2 6 1
ATOM   1791 CE1 PHE 263 6.530   23.229 45.019 1.000 12.49
ANISOU 1791 CE1 PHE 263 1718    1173   1857   31 -370  1 3 6
ATOM   1792 CE2 PHE 263 4.769   24.601 45.836 1.000 13.12
ANISOU 1792 CE2 PHE 263 1451    1382   2151   43 -292  3 5 3
ATOM   1793 CZ  PHE 263 5.491   24.112 44.762 1.000 12.42
ANISOU 1793 CZ  PHE 263 1318    1453   1948   -138  -187 6 4 9
ATOM   1794 C   PHE 263 6.636   20.505 48.530 1.000 8.91
ANISOU 1794 C   PHE 263 1076    1085   1223   -39   -142 2 4
ATOM   1795 O   PHE 263 7.868   20.406 48.538 1.000 10.98
ANISOU 1795 O   PHE 263 1098    1233   1842   -120  -224 - 1 4 5
ATOM   1796 N   PHE 264 5.856   19.691 47.812 1.000 9.19
ANISOU 1796 N   PHE 264 1089    1266   1136    -86   -105 - 8 2
ATOM   1797 CA  PHE 264 6.386   18.602 46.991 1.000 9.64
ANISOU 1797 CA  PHE 264 1009    1238   1417    -56   -60  - 1 2 6
ATOM   1798 CB  PHE 264 5.483   17.358 47.005 1.000 9.92
ANISOU 1798 CB  PHE 264 1209    1201   1359    -78   17 9
ATOM   1799 CG  PHE 264 5.265   16.673 48.336 1.000 11.22
ANISOU 1799 CG  PHE 264 1241    1647   1374   -121   38 7 7
ATOM   1800 CD1 PHE 264 6.292   16.236 49.139 1.000 15.38
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ANISOU 1800 CD1 PHE  264 1467    2641   1734   -225  -8 8 7 3
ATOM   1801 CD2 PHE  264 3.988   16.433 48.808 1.000 16.96
ANISOU 1801 CD2 PHE  264 1425    3252   1769   -610  -79  9 5 8
ATOM   1802 CE1 PHE  264 6.090   15.596 50.336 1.000 14.52
ANISOU 1802 CE1 PHE  264 1745    2417   1354   162   334  4 5 2
ATOM   1803 CE2 PHE  264 3.755   15.796 50.019 1.000 18.04
ANISOU 1803 CE2 PHE  264 1747    3405   1704   -590  -109 1 0 8
ATOM   1804 CZ  PHE  264 4.817   15.354 50.779 1.000 12.52
ANISOU 1804 CZ  PHE  264 1772    1536   1449   -57   227  3 3 4
ATOM   1805 C   PHE  264 6.535   19.038 45.533 1.000 8.98
ANISOU 1805 C   PHE  264 1103    919  1392   143   81  - 9 2
ATOM   1806 O   PHE  264 5.497   19.368 44.930 1.000 9.79
ANISOU 1806 O   PHE  264 991 1190     1540   28 105   1 0 3
ATOM   1807 N   LEU  265 7.758   19.031 44.999 1.000 8.43
ANISOU 1807 N   LEU  265 992 884 1325    173 -180  1 5 8
ATOM   1808 CA  LEU  265 7.984   19.224 43.566 1.000 8.66
ANISOU 1808 CA  LEU  265 883 1066     1339   63 -33   - 7 6
ATOM   1809 CB  LEU  265 9.309   19.964 43.328 1.000 10.10
ANISOU 1809 CB  LEU  265 1179    1188   1469   -225  -220 2 4 8
ATOM   1810 CG  LEU  265 9.570   20.351 41.871 1.000 9.37
ANISOU 1810 CG  LEU  265 1072    1009   1478   242   25 1 2 9
ATOM   1811 CD1 LEU  265 8.725   21.522 41.408 1.000 10.80
ANISOU 1811 CD1 LEU  265 1291    1004   1811   181   -114 2 9 6
ATOM   1812 CD2 LEU  265 11.048  20.684 41.678 1.000 10.87
ANISOU 1812 CD2 LEU  265 1129    1483   1519   134   43 1 4 6
ATOM   1813 C   LEU  265 7.933   17.849 42.875 1.000 10.21
ANISOU 1813 C   LEU  265 932 1188     1760   -6 -38   - 3 0 2
ATOM   1814 O   LEU  265 8.858   17.043 43.042 1.000 10.45
ANISOU 1814 O   LEU  265 1388    969  1612   84 -217  1 0 7
ATOM   1815 N   ARG  266 6.853   17.530 42.135 1.000 10.00
ANISOU 1815 N   ARG  266 1325    1069   1404   -120  -222 1  5
ATOM   1816 CA  ARG  266 6.572   16.198 41.628 1.000 10.50
ANISOU 1816 CA  ARG  266 1219    1217   1554   -294  110  - 2 1 0
ATOM   1817 CB  ARG  266 5.208   15.675 42.124 1.000 10.56
ANISOU 1817 CB  ARG  266 978 1460     1574   -168  -103  - 1 0 5
ATOM   1818 CG  ARG  266 4.965   15.894 43.609 1.000 11.24
ANISOU 1818 CG  ARG  266 1337    1373   1563   -40   119  2 0 6
ATOM   1819 CD  ARG  266 3.668   15.318 44.146 1.000 11.17
ANISOU 1819 CD  ARG  266 1113    1567   1564   -17   -49  - 1 1
ATOM   1820 NE  ARG  266 2.508   15.879 43.447 1.000 9.43
ANISOU 1820 NE  ARG  266 1341    1157   1086   24 -100  - 1 4 5
ATOM   1821 CZ  ARG  266 1.236   15.509 43.657 1.000 9.83
ANISOU 1821 CZ  ARG  266 1245    1194   1294   132   -159 -  1
ATOM   1822 NH1 ARG  266 0.961   14.567 44.572 1.000 11.20
ANISOU 1822 NH1 ARG  266 1208    1240   1806   -144  -454 2 7 2
ATOM   1823 NH2 ARG  266 0.225   16.048 42.975 1.000 11.08
ANISOU 1823 NH2 ARG  266 1460    1265   1484   191   -283 7  3
ATOM   1824 C   ARG  266 6.601   16.190 40.099 1.000 10.28
ANISOU 1824 C   ARG  266 1273    1089   1545   -200  -5 - 1 6 7
ATOM   1825 O   ARG  266 6.027   17.109 39.519 1.000 11.05
ANISOU 1825 O   ARG  266 1254    1153   1793   -132  47 - 6 4
ATOM   1826 N   PRO  267 7.215   15.162 39.496 1.000 10.27
ANISOU 1826 N   PRO  267 1194    1239   1468   -33   130  3  2
ATOM   1827 CD  PRO  267 7.828   13.963 40.109 1.000 12.36
ANISOU 1827 CD  PRO  267 1865    1132   1697   -26   -529 - 1 9 2
ATOM   1828 CA  PRO  267 7.304   15.157 38.036 1.000 10.12
ANISOU 1828 CA  PRO  267 1278    1095   1472   -129  38 - 1 8 5
ATOM   1829 CB  PRO  267 8.250   13.986 37.767 1.000 11.83
ANISOU 1829 CB  PRO  267 1489    1088   1919   -72   90 - 3 2 2
ATOM   1830 CG  PRO  267 8.017   13.053 38.913 1.000 10.72
ANISOU 1830 CG  PRO  267 960 1356     1755   95 -257  - 1 8 7
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ATOM   1831 C   PRO  267 5.977   14.929  37.344  1.000 10.86
ANISOU 1831 C   PRO  267 1330    1226    1570    -252  47 -161
ATOM   1832 O   PRO  267 5.030   14.421  37.934  1.000 12.03
ANISOU 1832 O   PRO  267 1316    1174    2080    -258  17 7  7
ATOM   1833 N   ASN  268 5.931   15.288  36.065  1.000 10.61
ANISOU 1833 N   ASN  268 1216    1146    1670    -70   -86  -129
ATOM   1834 CA  ASN  268 4.810   14.949  35.198  1.000 11.20
ANISOU 1834 CA  ASN  268 1285    1349    1622    -167  -43  -229
ATOM   1835 CB  ASN  268 4.954   15.664  33.846  1.000 14.02
ANISOU 1835 CB  ASN  268 2160    1410    1756    132   -316 2  3
ATOM   1836 CG  ASN  268 4.992   17.175  33.992  1.000 13.03
ANISOU 1836 CG  ASN  268 1811    1393    1747    189   -355 -8 8
ATOM   1837 OD1 ASN  268 4.046   17.748  34.566  1.000 16.65
ANISOU 1837 OD1 ASN  268 1910    1744    2673    292   -1 -159
ATOM   1838 ND2 ASN  268 6.037   17.818  33.495  1.000 14.19
ANISOU 1838 ND2 ASN  268 2505    1372    1516    161   264  -172
ATOM   1839 C   ASN  268 4.705   13.446  34.968  1.000 10.88
ANISOU 1839 C   ASN  268 1294    1314    1526    -75   -226 -164
ATOM   1840 O   ASN  268 5.715   12.732  34.979  1.000 11.68
ANISOU 1840 O   ASN  268 1534    1439    1464    87 -458  -121
ATOM   1841 N   ALA  269 3.484   12.980  34.688  1.000 12.22
ANISOU 1841 N   ALA  269 1484    1428    1732    -108  -397 -427
ATOM   1842 CA  ALA  269 3.277   11.547  34.417  1.000 12.12
ANISOU 1842 CA  ALA  269 1432    1356    1819    -238  -29  -282
ATOM   1843 CB  ALA  269 1.817   11.310  34.058  1.000 12.38
ANISOU 1843 CB  ALA  269 1439    1278    1985    -228  -183 2  9
ATOM   1844 C   ALA  269 4.125   10.981  33.283  1.000 11.26
ANISOU 1844 C   ALA  269 1445    1240    1592    25 -280  -141
ATOM   1845 O   ALA  269 4.493   9.800   33.263  1.000 12.53
ANISOU 1845 O   ALA  269 1428    1249    2085    -110  108  -188
ATOM   1846 N   ASP  270 4.438   11.799  32.276  1.000 11.47
ANISOU 1846 N   ASP  270 1701    1280    1378    -261  -341 -300
ATOM   1847 CA  ASP  270 5.214   11.378  31.113  1.000 11.92
ANISOU 1847 CA  ASP  270 1826    1106    1595    19 -183  -156
ATOM   1848 CB  ASP  270 4.760   12.096  29.850  1.000 14.13
ANISOU 1848 CB  ASP  270 1733    2038    1597    84 111 2 12
ATOM   1849 CG  ASP  270 5.050   13.568  29.777  1.000 15.98
ANISOU 1849 CG  ASP  270 2309    1939    1823    418   -418 5 64
ATOM   1850 OD1 ASP  270 5.432   14.186  30.762  1.000 21.61
ANISOU 1850 OD1 ASP  270 4101    1797    2312    176   -515 1 63
ATOM   1851 OD2 ASP  270 4.880   14.152  28.674  1.000 24.64
ANISOU 1851 OD2 ASP  270 3995    3221    2145    -62   -169 1395
ATOM   1852 C   ASP  270 6.721   11.542  31.264  1.000 12.86
ANISOU 1852 C   ASP  270 1840    1392    1654    -398  -61  3 15
ATOM   1853 O   ASP  270 7.443   11.290  30.292  1.000 14.83
ANISOU 1853 O   ASP  270 1813    2114    1709    -346  -141 4  9
ATOM   1854 N   PHE  271 7.230   11.911  32.439  1.000 11.85
ANISOU 1854 N   PHE  271 1360    1316    1824    59 -25 7  0
ATOM   1855 CA  PHE  271 8.665   11.927  32.715  1.000 11.14
ANISOU 1855 CA  PHE  271 1242    1349    1641    10 230 1 62
ATOM   1856 CB  PHE  271 8.972   12.378  34.143  1.000 12.19
ANISOU 1856 CB  PHE  271 1467    1444    1722    -96   -3 1 82
ATOM   1857 CG  PHE  271 10.385  11.992  34.597  1.000 12.77
ANISOU 1857 CG  PHE  271 1411    1640    1800    42 31 5  6
ATOM   1858 CD1 PHE  271 11.475  12.488  33.904  1.000 13.22
ANISOU 1858 CD1 PHE  271 1513    1516    1993    168   220  4  9
ATOM   1859 CD2 PHE  271 10.624  11.155  35.666  1.000 13.55
ANISOU 1859 CD2 PHE  271 1343    1674    2131    139   84 2 5 5
ATOM   1860 CE1 PHE  271 12.779  12.178  34.249  1.000 14.26
ANISOU 1860 CE1 PHE  271 1432    1760    2225    -39   46 -416
ATOM   1861 CE2 PHE  271 11.925  10.806  36.019  1.000 15.88
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ANISOU 1861 CE2 PHE  271 1537    1818    2679    -263   -675 2 6 0
ATOM   1862 CZ  PHE  271 13.006  11.288  35.304  1.000 14.15
ANISOU 1862 CZ  PHE  271 1166    1736    2475    7   -531   -4 6 7
ATOM   1863 C   PHE  271 9.259   10.550  32.410  1.000 11.27
ANISOU 1863 C   PHE  271 1359    1338    1585    75 271 3 4 8
ATOM   1864 O   PHE  271 8.785   9.531   32.920  1.000 12.97
ANISOU 1864 O   PHE  271 2011    1320    1596    -85    473   2 7 9
ATOM   1865 N   THR  272 10.261  10.498  31.541  1.000 11.95
ANISOU 1865 N   THR  272 1018    1503    2020    -214   300   -1 1 5
ATOM   1866 CA  THR  272 10.823  9.254   30.992  1.000 12.70
ANISOU 1866 CA  THR  272 1615    1557    1652    132    341   1 4 6
ATOM   1867 CB  THR  272 10.679  9.281   29.450  1.000 16.79
ANISOU 1867 CB  THR  272 1814    2829    1737    -595   157   -4 0 6
ATOM   1868 OG1 THR  272 9.301   9.471   29.090  1.000 18.02
ANISOU 1868 OG1 THR  272 1912    2921    2013    -497   -73   9 1
ATOM   1869 CG2 THR  272 11.200  7.976   28.856  1.000 17.02
ANISOU 1869 CG2 THR  272 2144    2857    1467    -475   538   -1 9 4
ATOM   1870 C   THR  272 12.272  9.057   31.423  1.000 12.02
ANISOU 1870 C   THR  272 1436    1573    1559    92 603 1 3 7
ATOM   1871 O   THR  272 13.055  10.031  31.437  1.000 14.17
ANISOU 1871 O   THR  272 1451    1583    2351    125   602   4 1 2
ATOM   1872 N   PHE  273 12.625  7.837   31.828  1.000 12.34
ANISOU 1872 N   PHE  273 1402    1585    1703    17 378 1 5 8
ATOM   1873 CA  PHE  273 13.953  7.492   32.312  1.000 12.20
ANISOU 1873 CA  PHE  273 1362    1364    1909    -126   336   1 4 7
ATOM   1874 CB  PHE  273 13.951  7.514   33.861  1.000 12.37
ANISOU 1874 CB  PHE  273 1362    1447    1890    -102   211   - 8
ATOM   1875 CG  PHE  273 12.988  6.528   34.491  1.000 11.65
ANISOU 1875 CG  PHE  273 1398    1631    1396    -367   42   -2 1 5
ATOM   1876 CD1 PHE  273 11.684  6.889   34.773  1.000 14.11
ANISOU 1876 CD1 PHE  273 1531    2214    1614    -336   293   - 6 2
ATOM   1877 CD2 PHE  273 13.409  5.245   34.803  1.000 13.20
ANISOU 1877 CD2 PHE  273 2024    1639    1352    -358   339   - 9
ATOM   1878 CE1 PHE  273 10.793  5.993   35.323  1.000 13.25
ANISOU 1878 CE1 PHE  273 1536    2081    1418    -98    447   4 2
ATOM   1879 CE2 PHE  273 12.530  4.329   35.327  1.000 13.39
ANISOU 1879 CE2 PHE  273 1529    1905    1654    -224   140   2 8 3
ATOM   1880 CZ  PHE  273 11.227  4.706   35.604  1.000 14.75
ANISOU 1880 CZ  PHE  273 1444    2260    1902    -90    -186 2 7 5
ATOM   1881 C   PHE  273 14.423  6.135   31.795  1.000 12.45
ANISOU 1881 C   PHE  273 1278    1526    1927    -120   317   - 3 1
ATOM   1882 O   PHE  273 13.645  5.311   31.291  1.000 11.95
ANISOU 1882 O   PHE  273 1590    1580    1370    -137   226   - 1 3
ATOM   1883 N   SER  274 15.717  5.854   31.952  1.000 12.07
ANISOU 1883 N   SER  274 1270    1640    1677    -29    558   3 5 3
ATOM   1884 CA  SER  274 16.335  4.586   31.604  1.000 14.39
ANISOU 1884 CA  SER  274 1583    1534    2349    43 707 3 8 4
ATOM   1885 CB  SER  274 17.845  4.771   31.438  1.000 14.49
ANISOU 1885 CB  SER  274 1578    1727    2202    213   695   3 2 9
ATOM   1886 OG  SER  274 18.564  3.558   31.424  1.000 14.97
ANISOU 1886 OG  SER  274 1763    1848    2078    349   348   - 1 3
ATOM   1887 C   SER  274 16.100  3.505   32.666  1.000 13.12
ANISOU 1887 C   SER  274 1670    1481    1833    8  461 1 3 7
ATOM   1888 O   SER  274 16.438  3.700   33.834  1.000 13.50
ANISOU 1888 O   SER  274 1493    1518    2116    -65   119   1 5
ATOM   1889 N   VAL  275 15.533  2.359   32.271  1.000 11.90
ANISOU 1889 N   VAL  275 1476    1618    1427    -110  490   1 9 5
ATOM   1890 CA  VAL  275 15.283  1.254   33.180  1.000 11.41
ANISOU 1890 CA  VAL  275 1708    1424    1204    -8 286 7 6
ATOM   1891 CB  VAL  275 14.346  0.198   32.543  1.000 12.74
ANISOU 1891 CB  VAL  275 1732    1300    1809    62 164   - 1 6
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ATOM   1892 CG1 VAL  275 14.157  -1.020  33.437  1.000 16.10
ANISOU 1892 CG1 VAL  275 2352    1803    1962    -614  -663 3 7 0
ATOM   1893 CG2 VAL  275 12.961  0.763   32.261  1.000 13.81
ANISOU 1893 CG2 VAL  275 1535    1786    1924    16 363 1 2 6
ATOM   1894 C   VAL  275 16.577  0.622   33.692  1.000 12.62
ANISOU 1894 C   VAL  275 1574    1628    1594    14 375 1 3 6
ATOM   1895 O   VAL  275 16.729  0.405   34.926  1.000 13.01
ANISOU 1895 O   VAL  275 1667    1643    1634    9  118 1 8 0
ATOM   1896 N   PRO  276 17.569  0.286   32.889  1.000 14.64
ANISOU 1896 N   PRO  276 1583    2066    1914    2  454 - 4 2
ATOM   1897 CD  PRO  276 17.583  0.285   31.415  1.000 15.84
ANISOU 1897 CD  PRO  276 1565    2536    1916    89 755 3 5
ATOM   1898 CA  PRO  276 18.827  -0.250  33.453  1.000 16.76
ANISOU 1898 CA  PRO  276 1667    2403    2296    261   393  -1 6 3
ATOM   1899 CB  PRO  276 19.732  -0.503  32.236  1.000 18.27
ANISOU 1899 CB  PRO  276 1804    2568    2571    411   574  - 1 4 2
ATOM   1900 CG  PRO  276 18.868  -0.385  31.029  1.000 18.96
ANISOU 1900 CG  PRO  276 2147    2763    2293    725   694  - 3 7
ATOM   1901 C   PRO  276 19.500  0.710   34.420  1.000 16.32
ANISOU 1901 C   PRO  276 1521    2342    2336    115   237  6 7
ATOM   1902 O   PRO  276 20.035  0.277   35.456  1.000 16.78
ANISOU 1902 O   PRO  276 1411    2689    2275    93 376 2 5 3
ATOM   1903 N   LEU  277 19.475  2.019   34.155  1.000 16.58
ANISOU 1903 N   LEU  277 1835    2412    2052    -15   483  1 4 8
ATOM   1904 CA  LEU  277 20.142  2.919   35.099  1.000 17.70
ANISOU 1904 CA  LEU  277 1990    2226    2511    -21   362  1 1 8
ATOM   1905 CB  LEU  277 20.298  4.277   34.425  1.000 20.20
ANISOU 1905 CB  LEU  277 2952    2292    2432    -1 -14 2 7 1
ATOM   1906 CG  LEU  277 21.048  5.359   35.186  1.000 20.86
ANISOU 1906 CG  LEU  277 2213    2221    3490    -32   -355 4 8 2
ATOM   1907 CD1 LEU  277 22.446  4.888   35.531  1.000 34.24
ANISOU 1907 CD1 LEU  277 2157    2303    8552    69 -842  2 5 8
ATOM   1908 CD2 LEU  277 21.062  6.620   34.334  1.000 31.91
ANISOU 1908 CD2 LEU  277 4745    2460    4918    -474  -572 1 1 5 0
ATOM   1909 C   LEU  277 19.411  2.989   36.430  1.000 16.55
ANISOU 1909 C   LEU  277 1975    1885    2430    -218  211  - 2 4 3
ATOM   1910 O   LEU  277 19.997  3.116   37.517  1.000 19.19
ANISOU 1910 O   LEU  277 2179    2636    2476    -617  50 1 2 2
ATOM   1911 N   ALA  278 18.080  2.905   36.386  1.000 15.48
ANISOU 1911 N   ALA  278 2008    1904    1969    -358  279  1 1 2
ATOM   1912 CA  ALA  278 17.308  2.896   37.636  1.000 14.51
ANISOU 1912 CA  ALA  278 2109    1763    1641    -309  74 1 6 7
ATOM   1913 CB  ALA  278 15.814  2.896   37.347  1.000 15.41
ANISOU 1913 CB  ALA  278 2017    1773    2064    66 301 6 2 6
ATOM   1914 C   ALA  278 17.710  1.684   38.479  1.000 14.55
ANISOU 1914 C   ALA  278 1972    1869    1689    -195  -255 7  9
ATOM   1915 O   ALA  278 17.894  1.770   39.683  1.000 13.80
ANISOU 1915 O   ALA  278 1444    2144    1655    -250  -166 8  9
ATOM   1916 N   ARG  279 17.841  0.530   37.842  1.000 13.86
ANISOU 1916 N   ARG  279 1795    1728    1742    -432  -128 1 6 9
ATOM   1917 CA  ARG  279 18.242  -0.679  38.560  1.000 15.88
ANISOU 1917 CA  ARG  279 1995    1973    2064    59 355 4 1 1
ATOM   1918 CB  ARG  279 18.204  -1.922  37.648  1.000 16.83
ANISOU 1918 CB  ARG  279 1889    1897    2609    84 544 2 5 0
ATOM   1919 CG  ARG  279 16.790  -2.323  37.291  1.000 19.63
ANISOU 1919 CG  ARG  279 2123    2196    3139    -63   233  9  1
ATOM   1920 CD  ARG  279 16.656  -3.288  36.131  1.000 27.03
ANISOU 1920 CD  ARG  279 3924    3198    3150    -603  -275 - 1 9 8
ATOM   1921 NE  ARG  279 17.236  -4.578  36.364  1.000 27.45
ANISOU 1921 NE  ARG  279 4659    2854    2915    -359  751  - 7 8 9
ATOM   1922 CZ  ARG  279 16.714  -5.717  36.779  1.000 32.85
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ANISOU 1922 CZ  ARG 279 4486  3045  4948  -475  448  -222
ATOM   1923 NH1 ARG 279 15.424 -5.874 37.089 1.000 29.96
ANISOU 1923 NH1 ARG 279 4653  2168  4562  -103  967  -678
ATOM   1924 NH2 ARG 279 17.551 -6.750 36.890 1.000 37.87
ANISOU 1924 NH2 ARG 279 4879  2436  7074  -276 3278 -824
ATOM   1925 C   ARG 279 19.628 -0.519 39.150 1.000 17.48
ANISOU 1925 C   ARG 279 2118  1653  2871   75 -8 705
ATOM   1926 O   ARG 279 19.916 -1.064 40.212 1.000 26.82
ANISOU 1926 O   ARG 279 3764  3102  3325 -1987 -1467 1383
ATOM   1927 N   GLU 280 20.538 0.189  38.505 1.000 17.73
ANISOU 1927 N   GLU 280 1983  2293  2459   109  609  37
ATOM   1928 CA  GLU 280 21.899 0.317  39.026 1.000 19.66
ANISOU 1928 CA  GLU 280 2049  2023  3396   125  215  737
ATOM   1929 CB  GLU 280 22.836 0.886  37.936 1.000 20.17
ANISOU 1929 CB  GLU 280 1648  2457  3560   464  138 1099
ATOM   1930 CG  GLU 280 22.964 -0.149 36.818 1.000 31.79
ANISOU 1930 CG  GLU 280 3477  4175  4427   801 1187  -4
ATOM   1931 CD  GLU 280 23.698 0.341  35.590 1.000 39.66
ANISOU 1931 CD  GLU 280 5144  5703  4221   -64 1339  -6
ATOM   1932 OE1 GLU 280 24.466 1.327  35.685 1.000 39.65
ANISOU 1932 OE1 GLU 280 3464  5891  5710   334  574 1639
ATOM   1933 OE2 GLU 280 23.489 -0.294 34.519 1.000 41.55
ANISOU 1933 OE2 GLU 280 5257  6747  3781  2245 -184 102
ATOM   1934 C   GLU 280 21.984 1.188  40.266 1.000 19.68
ANISOU 1934 C   GLU 280 1488  2350  3640  -566  162  490
ATOM   1935 O   GLU 280 23.031 1.142  40.958 1.000 25.69
ANISOU 1935 O   GLU 280 1871  3766  4123   231 -245 180
ATOM   1936 N   CYS 281 20.943 1.980  40.565 1.000 18.57
ANISOU 1936 N   CYS 281 1560  2609  2887  -406 -211 176
ATOM   1937 CA  CYS 281 21.098 2.762  41.806 1.000 23.83
ANISOU 1937 CA  CYS 281 3222  2647  3184 -1189 176  -122
ATOM   1938 CB  CYS 281 21.079 4.264  41.523 1.000 25.40
ANISOU 1938 CB  CYS 281 3278  2655  3718  -426  368  -46
ATOM   1939 SG  CYS 281 19.587 4.904  40.763 1.000 27.05
ANISOU 1939 SG  CYS 281 3069  2914  4295  -522  -37 -794
ATOM   1940 C   CYS 281 20.098 2.406  42.907 1.000 16.99
ANISOU 1940 C   CYS 281 1377  1604  3475   109   -6 -546
ATOM   1941 O   CYS 281 19.971 3.173  43.889 1.000 17.04
ANISOU 1941 O   CYS 281 2294  1277  2902  -204 -484 -129
ATOM   1942 N   GLY 282 19.447 1.245  42.794 1.000 15.23
ANISOU 1942 N   GLY 282 1617  1597  2572     3  -58 -436
ATOM   1943 CA  GLY 282 18.731 0.674  43.914 1.000 15.61
ANISOU 1943 CA  GLY 282 1565  1973  2394     6 -331  -266
ATOM   1944 C   GLY 282 17.246 0.519  43.727 1.000 13.75
ANISOU 1944 C   GLY 282 1635  1562  2029  -270 -446  -78
ATOM   1945 O   GLY 282 16.585 0.012  44.639 1.000 14.99
ANISOU 1945 O   GLY 282 1751  1630  2313   207 -242 455
ATOM   1946 N   PHE 283 16.744 1.009  42.582 1.000 12.65
ANISOU 1946 N   PHE 283 1434  1803  1570  -200   18 -252
ATOM   1947 CA  PHE 283 15.292 0.886  42.374 1.000 11.80
ANISOU 1947 CA  PHE 283 1477  1032  1974   -15 -264  46
ATOM   1948 CB  PHE 283 14.839 1.890  41.295 1.000 14.13
ANISOU 1948 CB  PHE 283 2262   972  2136   109  -187  159
ATOM   1949 CG  PHE 283 14.906 3.351  41.757 1.000 12.63
ANISOU 1949 CG  PHE 283 1711  1033  2055    47  -86   9
ATOM   1950 CD1 PHE 283 13.851 3.928  42.409 1.000 13.45
ANISOU 1950 CD1 PHE 283 1697  1399  2013  -166   24 -229
ATOM   1951 CD2 PHE 283 16.037 4.111  41.519 1.000 13.15
ANISOU 1951 CD2 PHE 283 1567  1135  2295   142  -41  -99
ATOM   1952 CE1 PHE 283 13.903 5.248  42.839 1.000 15.61
ANISOU 1952 CE1 PHE 283 2111  1649  2171  -202  484 -617
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ATOM   1953 CE2 PHE  283 16.112  5.432  41.963 1.000 12.60
ANISOU 1953 CE2 PHE  283 1783    937  2068    32  -18   264
ATOM   1954 CZ  PHE  283 15.040  5.993  42.641 1.000 13.37
ANISOU 1954 CZ  PHE  283 1863    865  2352   187  -149   13
ATOM   1955 C   PHE  283 14.915 -0.534  41.972 1.000 11.23
ANISOU 1955 C   PHE  283 1527    974  1765    63  -172   65
ATOM   1956 O   PHE  283 15.471 -1.071  40.990 1.000 13.24
ANISOU 1956 O   PHE  283 1249   1428  2355   175  -120  -361
ATOM   1957 N   ASP  284 13.998 -1.130  42.712 1.000 12.31
ANISOU 1957 N   ASP  284 1607   1333  1736  -268  -312   87
ATOM   1958 CA  ASP  284 13.589 -2.528  42.527 1.000 12.48
ANISOU 1958 CA  ASP  284 1725   1202  1814  -148  -543   350
ATOM   1959 CB  ASP  284 13.159 -3.156  43.876 1.000 12.67
ANISOU 1959 CB  ASP  284 2014   1145  1656   -50  -406   135
ATOM   1960 CG  ASP  284 13.261 -4.667  43.909 1.000 13.40
ANISOU 1960 CG  ASP  284 2077   1171  1843   110  -419   363
ATOM   1961 OD1 ASP  284 13.861 -5.246  42.974 1.000 14.98
ANISOU 1961 OD1 ASP  284 1956   1094  2640   -87   116   0
ATOM   1962 OD2 ASP  284 12.762 -5.306  44.883 1.000 15.79
ANISOU 1962 OD2 ASP  284 2494   1539  1966  -330  -446   438
ATOM   1963 C   ASP  284 12.478 -2.641  41.510 1.000 10.82
ANISOU 1963 C   ASP  284 1238   1387  1487  -205   -99   123
ATOM   1964 O   ASP  284 11.373 -3.100  41.777 1.000 12.28
ANISOU 1964 O   ASP  284 1331   1175  2159  -209   48   191
ATOM   1965 N   VAL  285 12.751 -2.154  40.308 1.000 11.32
ANISOU 1965 N   VAL  285 1204   1671  1426   -93   -48   61
ATOM   1966 CA  VAL  285 11.748 -2.062  39.260 1.000 11.45
ANISOU 1966 CA  VAL  285 1468   1384  1500    39  -219   -15
ATOM   1967 CB  VAL  285 12.153 -1.072  38.157 1.000 11.58
ANISOU 1967 CB  VAL  285 1412   1523  1465  -388  -428   -8
ATOM   1968 CG1 VAL  285 12.278  0.362  38.679 1.000 15.02
ANISOU 1968 CG1 VAL  285 2209   1458  2040  -264  -442   -32
ATOM   1969 CG2 VAL  285 13.467 -1.482  37.495 1.000 15.70
ANISOU 1969 CG2 VAL  285 1909   1443  2615  -159   309   447
ATOM   1970 C   VAL  285 11.424 -3.431  38.642 1.000 10.83
ANISOU 1970 C   VAL  285 1232   1281  1602    93  -221   108
ATOM   1971 O   VAL  285 12.267 -4.301  38.520 1.000 12.13
ANISOU 1971 O   VAL  285 1214   1192  2202   -28   300   162
ATOM   1972 N   SER  286 10.168 -3.523  38.248 1.000 11.09
ANISOU 1972 N   SER  286 1116   1608  1489   -76    96   67
ATOM   1973 CA  SER  286 9.558 -4.622  37.510 1.000 11.32
ANISOU 1973 CA  SER  286 1104   1479  1718   -41  -274   252
ATOM   1974 CB  SER  286 8.483 -5.292  38.344 1.000 9.88
ANISOU 1974 CB  SER  286 1328   1141  1285    72  -207    70
ATOM   1975 OG  SER  286 7.570 -4.361  38.905 1.000 11.34
ANISOU 1975 OG  SER  286 1391   1188  1729   147  -153   75
ATOM   1976 C   SER  286 9.019 -4.106  36.175 1.000 10.34
ANISOU 1976 C   SER  286 1127   1227  1575    28   -87   245
ATOM   1977 O   SER  286 7.829 -4.112  35.869 1.000 12.62
ANISOU 1977 O   SER  286 1223   2219  1353     0  -178   228
ATOM   1978 N   LEU  287 9.926 -3.622  35.335 1.000 12.45
ANISOU 1978 N   LEU  287 1414   1664  1653  -212    3   161
ATOM   1979 CA  LEU  287 9.654 -2.900  34.099 1.000 12.59
ANISOU 1979 CA  LEU  287 1622   1558  1605  -366   94   184
ATOM   1980 CB  LEU  287 10.145 -1.452  34.210 1.000 12.91
ANISOU 1980 CB  LEU  287 1716   1591  1597  -373   -95    27
ATOM   1981 CG  LEU  287 9.452 -0.590  35.264 1.000 12.96
ANISOU 1981 CG  LEU  287 1182   1848  1895  -407   -51  -170
ATOM   1982 CD1 LEU  287 10.229  0.708  35.484 1.000 13.34
ANISOU 1982 CD1 LEU  287 1644   1108  2318   -38  -124   223
ATOM   1983 CD2 LEU  287 8.006 -0.248  34.914 1.000 14.56
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ANISOU 1983 CD2 LEU  287 1716    1548    2267    36 -550  318
ATOM   1984  C   LEU  287 10.319  -3.610  32.928  1.000 12.63
ANISOU 1984  C   LEU  287 1837    1244    1719    -233  248  354
ATOM   1985  O   LEU  287 11.529  -3.805  32.916  1.000 16.68
ANISOU 1985  O   LEU  287 1779    1998    2560    -292  390  -149
ATOM   1986  N   ASP  288 9.531   -4.045  31.950  1.000 13.91
ANISOU 1986  N   ASP  288 2080    1751    1455    4  223 227
ATOM   1987  CA  ASP  288 10.079  -4.688  30.759  1.000 15.50
ANISOU 1987  CA  ASP  288 2029    2269    1593    -122  605  153
ATOM   1988  CB  ASP  288 8.979   -5.478  30.043  1.000 17.00
ANISOU 1988  CB  ASP  288 2722    2125    1613    -250  362  - 2
ATOM   1989  CG  ASP  288 9.480   -6.452  29.014  1.000 19.30
ANISOU 1989  CG  ASP  288 2467    2980    1885    173  243  -377
ATOM   1990  OD1 ASP  288 10.447  -7.183  29.292  1.000 25.95
ANISOU 1990  OD1 ASP  288 2812    3190    3856    501  -239 -783
ATOM   1991  OD2 ASP  288 8.911   -6.508  27.907  1.000 31.76
ANISOU 1991  OD2 ASP  288 5375    4430    2260    1266  -849 -1154
ATOM   1992  C   ASP  288 10.654  -3.652  29.811  1.000 17.08
ANISOU 1992  C   ASP  288 2259    2631    1602    -263  248  534
ATOM   1993  O   ASP  288 10.197  -2.502  29.708  1.000 23.31
ANISOU 1993  O   ASP  288 4276    2268    2313    -244  -13  297
ATOM   1994  N   GLY  289 11.702  -3.966  29.049  1.000 21.26
ANISOU 1994  N   GLY  289 2748    3699    1632    -610  752  511
ATOM   1995  CA  GLY  289 12.116  -2.880  28.152  1.000 21.65
ANISOU 1995  CA  GLY  289 2842    3988    1396    -1163 71 626
ATOM   1996  C   GLY  289 13.084  -1.859  28.736  1.000 22.09
ANISOU 1996  C   GLY  289 2888    3509    1996    -738  -23  243
ATOM   1997  O   GLY  289 13.414  -1.836  29.924  1.000 20.34
ANISOU 1997  O   GLY  289 3230    2606    1891    -918  124  147
ATOM   1998  N   GLU  290 13.562  -0.952  27.869  1.000 16.48
ANISOU 1998  N   GLU  290 2665    2099    1496    5  222 -445
ATOM   1999  CA  GLU  290 14.716  -0.117  28.182  1.000 16.94
ANISOU 1999  CA  GLU  290 2470    2161    1806    81 411 -484
ATOM   2000  CB  GLU  290 15.579  0.012   26.912  1.000 20.26
ANISOU 2000  CB  GLU  290 2670    2740    2287    414  863  -239
ATOM   2001  CG  GLU  290 16.071  -1.333  26.386  1.000 24.53
ANISOU 2001  CG  GLU  290 3251    3153    2916    664  1218 -612
ATOM   2002  CD  GLU  290 16.812  -2.170  27.411  1.000 27.91
ANISOU 2002  CD  GLU  290 3019    3161    4424    989  940  -251
ATOM   2003  OE1 GLU  290 17.874  -1.747  27.917  1.000 35.13
ANISOU 2003  OE1 GLU  290 3913    4458    4975    963  -85  -877
ATOM   2004  OE2 GLU  290 16.336  -3.280  27.734  1.000 43.76
ANISOU 2004  OE2 GLU  290 6893    3257    6478    -30  -748 598
ATOM   2005  C   GLU  290 14.406   1.271   28.716  1.000 14.67
ANISOU 2005  C   GLU  290 2512    1756    1308    95 142 1 0
ATOM   2006  O   GLU  290 15.260   1.840   29.412  1.000 15.25
ANISOU 2006  O   GLU  290 2074    1969    1750    50 418 -262
ATOM   2007  N   THR  291 13.232   1.814   28.437  1.000 15.72
ANISOU 2007  N   THR  291 2173    2393    1406    78 346 -519
ATOM   2008  CA  THR  291 12.792   3.087   28.991  1.000 15.16
ANISOU 2008  CA  THR  291 2080    1845    1833    -88  631  - 15
ATOM   2009  CB  THR  291 12.766   4.226   27.956  1.000 18.67
ANISOU 2009  CB  THR  291 2724    2529    1842    -361  769  336
ATOM   2010  OG1 THR  291 11.756   4.009   26.976  1.000 22.93
ANISOU 2010  OG1 THR  291 3313    3135    2265    445  78 146
ATOM   2011  CG2 THR  291 14.096   4.306   27.213  1.000 21.82
ANISOU 2011  CG2 THR  291 3035    2126    3130    357  1450 902
ATOM   2012  C   THR  291 11.402   2.920   29.622  1.000 12.86
ANISOU 2012  C   THR  291 1863    1604    1421    47 305 219
ATOM   2013  O   THR  291 10.625   2.024   29.270  1.000 16.13
ANISOU 2013  O   THR  291 2344    1983    1804    -303  750  -431
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ATOM   2014 N   ALA 292 11.037  3.791  30.542 1.000 12.41
ANISOU 2014 N   ALA 292 1495   1363   1859    -2 256 7 7
ATOM   2015 CA  ALA 292 9.746   3.839  31.202 1.000 11.57
ANISOU 2015 CA  ALA 292 1362   1257   1779    -213  153  3 7
ATOM   2016 CB  ALA 292 9.718   2.954  32.439 1.000 12.62
ANISOU 2016 CB  ALA 292 1768   1245   1784    100   357  4
ATOM   2017 C   ALA 292 9.385   5.255  31.614 1.000 10.32
ANISOU 2017 C   ALA 292 1317   1335   1270    -181  99 5 4
ATOM   2018 O   ALA 292 10.266  6.134  31.701 1.000 10.97
ANISOU 2018 O   ALA 292 1389   1138   1641    -146  279  1 0 4
ATOM   2019 N   THR 293 8.091   5.445  31.882 1.000 12.32
ANISOU 2019 N   THR 293 1486   1547   1647    -314  563  -2 8 4
ATOM   2020 CA  THR 293 7.626   6.715  32.421 1.000 12.28
ANISOU 2020 CA  THR 293 1717   1460   1489    -168  337  -2 0 0
ATOM   2021 CB  THR 293 6.352   7.215  31.733 1.000 13.27
ANISOU 2021 CB  THR 293 2128   1182   1730    -258  -159 -2 8 4
ATOM   2022 OG1 THR 293 5.317   6.237  31.911 1.000 13.85
ANISOU 2022 OG1 THR 293 1831   1217   2216    8  -131  7 4
ATOM   2023 CG2 THR 293 6.474   7.303  30.212 1.000 13.72
ANISOU 2023 CG2 THR 293 1791   1683   1738    -252  -56  -4 0 5
ATOM   2024 C   THR 293 7.363   6.635  33.937 1.000 10.58
ANISOU 2024 C   THR 293 1439   1050   1533    12 447 9
ATOM   2025 O   THR 293 7.211   5.576  34.553 1.000 10.29
ANISOU 2025 O   THR 293 1049   1102   1758    -56   93 1 1 8
ATOM   2026 N   PHE 294 7.243   7.810  34.569 1.000 11.53
ANISOU 2026 N   PHE 294 1794   1093   1494    -307  306  - 6 6
ATOM   2027 CA  PHE 294 6.806   7.939  35.950 1.000 10.41
ANISOU 2027 CA  PHE 294 1432   1061   1463    -174  125  -1 6 2
ATOM   2028 CB  PHE 294 6.709   9.426  36.336 1.000 12.25
ANISOU 2028 CB  PHE 294 1930   1030   1694    -164  292  - 6 4
ATOM   2029 CG  PHE 294 6.270   9.658  37.770 1.000 12.77
ANISOU 2029 CG  PHE 294 1880   1136   1837    -103  178  -4 2 7
ATOM   2030 CD1 PHE 294 7.123   9.462  38.839 1.000 14.73
ANISOU 2030 CD1 PHE 294 1976   1893   1727    -539  161  -1 3 2
ATOM   2031 CD2 PHE 294 4.989   10.068 38.056 1.000 16.59
ANISOU 2031 CD2 PHE 294 2180   1923   2199    348   386  -4 9 2
ATOM   2032 CE1 PHE 294 6.726   9.673  40.144 1.000 14.36
ANISOU 2032 CE1 PHE 294 1598   2028   1830    -505  280  -1 1 8
ATOM   2033 CE2 PHE 294 4.575   10.275 39.345 1.000 16.75
ANISOU 2033 CE2 PHE 294 2214   2062   2087    692   144  -6 0 2
ATOM   2034 CZ  PHE 294 5.426   10.065 40.413 1.000 15.17
ANISOU 2034 CZ  PHE 294 2040   1426   2296    327   97 -1 3 5
ATOM   2035 C   PHE 294 5.484   7.195  36.172 1.000 10.89
ANISOU 2035 C   PHE 294 1401   1200   1536    -155  78 1 3 7
ATOM   2036 O   PHE 294 5.325   6.425  37.125 1.000 10.67
ANISOU 2036 O   PHE 294 1396   1297   1360    90 337 1 0 5
ATOM   2037 N   GLN 295 4.487   7.355  35.299 1.000 10.62
ANISOU 2037 N   GLN 295 1399   1187   1450    -18   88 - 2 4
ATOM   2038 CA  GLN 295 3.217   6.612  35.393 1.000 11.31
ANISOU 2038 CA  GLN 295 1433   1205   1660    -96   120  -3 2 1
ATOM   2039 CB  GLN 295 2.284   7.053  34.254 1.000 11.66
ANISOU 2039 CB  GLN 295 1425   1053   1953    -25   63 - 1 4 1
ATOM   2040 CG  GLN 295 0.951   6.360  34.200 1.000 11.05
ANISOU 2040 CG  GLN 295 1573   1011   1614    -93   -118 1 8
ATOM   2041 CD  GLN 295 0.052   6.843  33.087 1.000 11.35
ANISOU 2041 CD  GLN 295 1592   1326   1395    173   57 - 1 3
ATOM   2042 OE1 GLN 295 0.349   7.823  32.378 1.000 15.06
ANISOU 2042 OE1 GLN 295 2306   1589   1825    110   7  3 7 9
ATOM   2043 NE2 GLN 295 -1.053  6.153  32.914 1.000 13.90
ANISOU 2043 NE2 GLN 295 1511   1757   2015    156   -282 2 0 8
ATOM   2044 C   GLN 295 3.412   5.107  35.389 1.000 10.12
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ANISOU	2044	C	GLN	295	1154	1203	1486	21	160	-191
ATOM	2045	O	GLN	295	2.827	4.309	36.128	1.000	11.82	
ANISOU	2045	O	GLN	295	1264	1542	1686	-107	41	137
ATOM	2046	N	ASP	296	4.267	4.558	34.538	1.000	9.35	
ANISOU	2046	N	ASP	296	1076	1056	1422	-118	-76	-275
ATOM	2047	CA	ASP	296	4.655	3.172	34.416	1.000	9.91	
ANISOU	2047	CA	ASP	296	1241	1139	1387	56	60	-243
ATOM	2048	CB	ASP	296	5.699	2.852	33.347	1.000	10.26	
ANISOU	2048	CB	ASP	296	1315	1156	1429	113	132	-36
ATOM	2049	CG	ASP	296	5.343	2.981	31.885	1.000	11.42	
ANISOU	2049	CG	ASP	296	1357	1578	1405	358	121	-199
ATOM	2050	OD1	ASP	296	4.143	2.904	31.531	1.000	13.82	
ANISOU	2050	OD1	ASP	296	1511	1744	1997	149	-209	-62
ATOM	2051	OD2	ASP	296	6.282	3.151	31.047	1.000	13.48	
ANISOU	2051	OD2	ASP	296	1802	1758	1564	228	364	73
ATOM	2052	C	ASP	296	5.175	2.682	35.770	1.000	10.31	
ANISOU	2052	C	ASP	296	1416	1141	1361	16	91	-198
ATOM	2053	O	ASP	296	4.852	1.551	36.197	1.000	11.40	
ANISOU	2053	O	ASP	296	1428	1452	1453	-288	32	35
ATOM	2054	N	TRP	297	6.004	3.484	36.441	1.000	10.88	
ANISOU	2054	N	TRP	297	1752	1144	1238	-161	11	55
ATOM	2055	CA	TRP	297	6.646	3.104	37.685	1.000	11.26	
ANISOU	2055	CA	TRP	297	1768	1215	1294	-217	-57	45
ATOM	2056	CB	TRP	297	7.899	3.999	37.890	1.000	10.31	
ANISOU	2056	CB	TRP	297	1387	1417	1112	-87	213	120
ATOM	2057	CG	TRP	297	8.621	3.651	39.172	1.000	10.98	
ANISOU	2057	CG	TRP	297	1456	1394	1324	164	-29	-43
ATOM	2058	CD2	TRP	297	9.082	4.534	40.202	1.000	12.49	
ANISOU	2058	CD2	TRP	297	1255	1729	1761	75	-298	-197
ATOM	2059	CE2	TRP	297	9.692	3.755	41.201	1.000	16.08	
ANISOU	2059	CE2	TRP	297	1860	2049	2202	-294	-977	49
ATOM	2060	CE3	TRP	297	9.040	5.910	40.379	1.000	17.41	
ANISOU	2060	CE3	TRP	297	2778	1740	2096	-388	-916	-234
ATOM	2061	CD1	TRP	297	8.969	2.400	39.589	1.000	13.58	
ANISOU	2061	CD1	TRP	297	1617	1518	2025	0	-664	114
ATOM	2062	NE1	TRP	297	9.614	2.444	40.808	1.000	16.12	
ANISOU	2062	NE1	TRP	297	2165	1909	2051	-22	-873	220
ATOM	2063	CZ2	TRP	297	10.243	4.320	42.341	1.000	19.85	
ANISOU	2063	CZ2	TRP	297	2756	2383	2404	-951	-1337	267
ATOM	2064	CZ3	TRP	297	9.586	6.466	41.515	1.000	23.40	
ANISOU	2064	CZ3	TRP	297	4215	2030	2645	-1001	-1757	-77
ATOM	2065	CH2	TRP	297	10.181	5.670	42.486	1.000	21.51	
ANISOU	2065	CH2	TRP	297	3178	2457	2537	-910	-1473	-51
ATOM	2066	C	TRP	297	5.700	3.138	38.882	1.000	10.39	
ANISOU	2066	C	TRP	297	1172	1448	1329	-280	-237	391
ATOM	2067	O	TRP	297	5.574	2.159	39.639	1.000	13.52	
ANISOU	2067	O	TRP	297	1748	1830	1557	32	-91	703
ATOM	2068	N	ILE	298	5.033	4.272	39.079	1.000	12.08	
ANISOU	2068	N	ILE	298	1400	1710	1480	-49	83	451
ATOM	2069	CA	ILE	298	4.223	4.521	40.272	1.000	13.43	
ANISOU	2069	CA	ILE	298	1301	2484	1317	-199	-158	-33
ATOM	2070	CB	ILE	298	4.370	5.988	40.689	1.000	16.97	
ANISOU	2070	CB	ILE	298	1877	2908	1661	-1000	214	-630
ATOM	2071	CG2	ILE	298	3.538	6.423	41.876	1.000	22.01	
ANISOU	2071	CG2	ILE	298	3980	3121	1263	-233	546	-339
ATOM	2072	CG1	ILE	298	5.847	6.253	41.037	1.000	27.10	
ANISOU	2072	CG1	ILE	298	2588	5151	2557	-2140	-708	97
ATOM	2073	CD1	ILE	298	6.365	5.522	42.266	1.000	43.13	
ANISOU	2073	CD1	ILE	298	5185	8299	2904	-3717	-3055	708
ATOM	2074	C	ILE	298	2.772	4.116	40.131	1.000	10.94	
ANISOU	2074	C	ILE	298	1350	1652	1156	-165	-79	96

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ATOM   2075 O   ILE 298 2.137   3.844   41.155 1.000 12.67
ANISOU 2075 O   ILE 298 1689    1634    1493    -102  212  352
ATOM   2076 N   GLY 299 2.267   4.077   38.897 1.000 10.14
ANISOU 2076 N   GLY 299 1412    1057    1384    -51   -377 201
ATOM   2077 CA  GLY 299 0.866   3.822   38.695 1.000 10.72
ANISOU 2077 CA  GLY 299 1335    1084    1655    0  -229  -206
ATOM   2078 C   GLY 299 0.049   5.054   38.369 1.000 12.05
ANISOU 2078 C   GLY 299 1422    1293    1864    105   -292 0
ATOM   2079 O   GLY 299 0.585   6.088   37.976 1.000 13.11
ANISOU 2079 O   GLY 299 1917    1199    1866    174   80 - 23
ATOM   2080 N   GLY 300 -1.268  4.931   38.490 1.000 13.92
ANISOU 2080 N   GLY 300 1393    1531    2363    182   -410 -223
ATOM   2081 CA  GLY 300 -2.237  5.932   38.087 1.000 14.02
ANISOU 2081 CA  GLY 300 1524    1471    2331    217   -563 -336
ATOM   2082 C   GLY 300 -2.587  7.015   39.074 1.000 11.97
ANISOU 2082 C   GLY 300 940 1603     2004    67 -488  -295
ATOM   2083 O   GLY 300 -3.322  7.950   38.722 1.000 10.90
ANISOU 2083 O   GLY 300 1219    1408    1515    -37   -203 -134
ATOM   2084 N   ASN 301 -2.090  6.910   40.285 1.000 11.64
ANISOU 2084 N   ASN 301 948 1557     1917   -383  -327  165
ATOM   2085 CA  ASN 301 -2.195  7.915   41.323 1.000 13.39
ANISOU 2085 CA  ASN 301 1626    1904    1557    -191  -403 183
ATOM   2086 CB  ASN 301 -3.047  7.301   42.427 1.000 17.60
ANISOU 2086 CB  ASN 301 1391    2869    2426    -9 326 228
ATOM   2087 CG  ASN 301 -4.021  8.196   43.108 1.000 19.15
ANISOU 2087 CG  ASN 301 2549    2827    1900    805   59 377
ATOM   2088 OD1 ASN 301 -5.072  8.606   42.591 1.000 15.47
ANISOU 2088 OD1 ASN 301 1258    2340    2280    -253  339  - 8
ATOM   2089 ND2 ASN 301 -3.661  8.510   44.367 1.000 29.28
ANISOU 2089 ND2 ASN 301 3585    4783    2758    1521  -850 -885
ATOM   2090 C   ASN 301 -0.862  8.331   41.914 1.000 11.31
ANISOU 2090 C   ASN 301 1436    1669    1194    1  1   -168
ATOM   2091 O   ASN 301 -0.033  7.456   42.221 1.000 12.03
ANISOU 2091 O   ASN 301 1483    1548    1542    -151  -279 8  2
ATOM   2092 N   TYR 302 -0.634  9.628   42.133 1.000 11.53
ANISOU 2092 N   TYR 302 1186    1584    1611    -61   26 102
ATOM   2093 CA  TYR 302 0.573   10.046  42.838 1.000 11.90
ANISOU 2093 CA  TYR 302 1260    1395    1865    5  -212  225
ATOM   2094 CB  TYR 302 0.657   11.589  43.036 1.000 13.14
ANISOU 2094 CB  TYR 302 1768    1404    1820    -273  190  181
ATOM   2095 CG  TYR 302 1.082   12.287  41.750 1.000 10.88
ANISOU 2095 CG  TYR 302 1395    1347    1393    -321  2  -153
ATOM   2096 CD1 TYR 302 2.421   12.439  41.413 1.000 11.29
ANISOU 2096 CD1 TYR 302 1385    1246    1659    -58   98 - 46
ATOM   2097 CE1 TYR 302 2.859   13.075  40.248 1.000 10.60
ANISOU 2097 CE1 TYR 302 1055    1241    1732    -11   52 - 1
ATOM   2098 CD2 TYR 302 0.161   12.793  40.858 1.000 11.30
ANISOU 2098 CD2 TYR 302 1304    1332    1656    -145  105  - 26
ATOM   2099 CE2 TYR 302 0.573   13.406  39.690 1.000 11.72
ANISOU 2099 CE2 TYR 302 1013    1733    1708    -288  -138 161
ATOM   2100 CZ  TYR 302 1.907   13.551  39.375 1.000 10.35
ANISOU 2100 CZ  TYR 302 1009    1214    1709    -229  -50  - 19
ATOM   2101 OH  TYR 302 2.284   14.153  38.202 1.000 11.82
ANISOU 2101 OH  TYR 302 1192    1532    1766    -8 102 104
ATOM   2102 C   TYR 302 0.654   9.349   44.196 1.000 12.45
ANISOU 2102 C   TYR 302 1517    1450    1765    -181  -202 217
ATOM   2103 O   TYR 302 -0.375  9.230   44.878 1.000 13.55
ANISOU 2103 O   TYR 302 1464    1925    1759    -339  -211 7
ATOM   2104 N   VAL 303 1.868   8.967   44.542 1.000 12.06
ANISOU 2104 N   VAL 303 1517    1653    1413    -135  -3 340
ATOM   2105 CA  VAL 303 2.309   8.430   45.820 1.000 11.88
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ANISOU 2105 CA  VAL  303 1434    1609    1471    -368  -197 2 2 3
ATOM   2106 CB  VAL  303 2.755   6.967   45.736  1.000 14.57
ANISOU 2106 CB  VAL  303 1395    1682    2459    -217  -918 3 1 2
ATOM   2107 CG1 VAL  303 3.131   6.462   47.132  1.000 17.33
ANISOU 2107 CG1 VAL  303 2644    1608    2331    -48   -1114 6 1
ATOM   2108 CG2 VAL  303 1.703   6.041   45.122  1.000 14.80
ANISOU 2108 CG2 VAL  303 1876    1676    2069    -592  -639 3 2 2
ATOM   2109 C   VAL  303 3.467   9.328   46.303  1.000 13.88
ANISOU 2109 C   VAL  303 870 1791      2613    75  -286  -375
ATOM   2110 O   VAL  303 4.526   9.417   45.681  1.000 19.70
ANISOU 2110 O   VAL  303 1064    2307    4114    -61   323  -999
ATOM   2111 N   ASN  304 3.271   10.046  47.393  1.000 13.77
ANISOU 2111 N   ASN  304 1681    1815    1737    -479  -388 1 4 0
ATOM   2112 CA  ASN  304 4.205   11.077  47.828  1.000 13.37
ANISOU 2112 CA  ASN  304 1626    1240    2212    -213  -533 2 7 9
ATOM   2113 CB  ASN  304 3.460   12.223  48.566  1.000 13.24
ANISOU 2113 CB  ASN  304 1206    1454    2370    -243  -344 2 9 6
ATOM   2114 CG  ASN  304 2.457   12.922  47.667  1.000 14.16
ANISOU 2114 CG  ASN  304 1142    2326    1910    146    -88   2 3 0
ATOM   2115 OD1 ASN  304 2.776   13.283  46.540  1.000 16.65
ANISOU 2115 OD1 ASN  304 1408    2456    2464    107    185   9 1 6
ATOM   2116 ND2 ASN  304 1.263   13.126  48.209  1.000 17.45
ANISOU 2116 ND2 ASN  304 1414    2961    2257    545    181   3 1 5
ATOM   2117 C   ASN  304 5.325   10.588  48.728  1.000 11.18
ANISOU 2117 C   ASN  304 1382    1299    1566    -183  -163 1 1 2
ATOM   2118 O   ASN  304 6.396   11.232  48.699  1.000 12.07
ANISOU 2118 O   ASN  304 1325    1382    1879    -167   -66   - 5 9
ATOM   2119 N   ILE  305 5.092   9.541   49.516  1.000 12.56
ANISOU 2119 N   ILE  305 1791    1296    1685    -152  -232 2 0 2
ATOM   2120 CA  ILE  305 6.063   9.011   50.463  1.000 14.01
ANISOU 2120 CA  ILE  305 2314    1393    1614    -55   -479 7   9
ATOM   2121 CB  ILE  305 5.781   9.493   51.906  1.000 14.44
ANISOU 2121 CB  ILE  305 2223    1604    1659    -29   -217 1 5 7
ATOM   2122 CG2 ILE  305 5.725   11.017  51.956  1.000 15.31
ANISOU 2122 CG2 ILE  305 1768    1608    2441    43  -479   - 3 1 4
ATOM   2123 CG1 ILE  305 4.543   8.853   52.498  1.000 14.83
ANISOU 2123 CG1 ILE  305 1779    1694    2163    27  -307   - 1 5 3
ATOM   2124 CD1 ILE  305 4.163   9.252   53.900  1.000 28.68
ANISOU 2124 CD1 ILE  305 3788    5324    1786    -1491 381   9 2
ATOM   2125 C   ILE  305 6.059   7.487   50.389  1.000 12.79
ANISOU 2125 C   ILE  305 1703    1355    1800    -260  -586 2 3 1
ATOM   2126 O   ILE  305 5.111   6.864   49.897  1.000 15.63
ANISOU 2126 O   ILE  305 1779    1564    2597    -185  -1008 2 7 7
ATOM   2127 N   ARG  306 7.170   6.896   50.829  1.000 13.04
ANISOU 2127 N   ARG  306 1618    1389    1946    -368  -598 3 8 3
ATOM   2128 CA  ARG  306 7.340   5.435   50.868  1.000 11.82
ANISOU 2128 CA  ARG  306 1352    1366    1773    -375  -154 4 4 4
ATOM   2129 CB  ARG  306 8.111   4.965   49.640  1.000 15.28
ANISOU 2129 CB  ARG  306 1976    1941    1886    -368   -19   1 1 1
ATOM   2130 CG  ARG  306 8.203   3.472   49.395  1.000 17.16
ANISOU 2130 CG  ARG  306 2566    1953    2001    -68    -68   7   6
ATOM   2131 CD  ARG  306 8.344   3.075   47.937  1.000 19.51
ANISOU 2131 CD  ARG  306 2921    2361    2130    -397  -396 - 3 0 2
ATOM   2132 NE  ARG  306 7.078   3.198   47.212  1.000 20.65
ANISOU 2132 NE  ARG  306 2693    2844    2309    -1056 -310 2 1 4
ATOM   2133 CZ  ARG  306 6.948   2.186   45.893  1.000 17.11
ANISOU 2133 CZ  ARG  306 2006    2225    2268    45   -91   5 9 6
ATOM   2134 NH1 ARG  306 8.013   3.065   45.083  1.000 21.58
ANISOU 2134 NH1 ARG  306 2405    2677    3116    -232  381   - 6 6 9
ATOM   2135 NH2 ARG  306 5.734   3.301   45.365  1.000 17.51
ANISOU 2135 NH2 ARG  306 2235    1550    2868    150   -484 - 1 6 2
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ATOM   2136 C   ARG  306 8.035   5.027   52.155 1.000 13.45
ANISOU 2136 C   ARG  306 2254    1018    1837    -246  -481 9  8
ATOM   2137 O   ARG  306 9.006   5.682   52.556 1.000 12.15
ANISOU 2137 O   ARG  306 1902    1099    1615    -18   -362 - 8 0
ATOM   2138 N   ARG  307 7.571   3.968   52.811 1.000 18.19
ANISOU 2138 N   ARG  307 3073    1620    2218    -734  -938 7 9 2
ATOM   2139 CA  ARG  307 8.197   3.380   53.989 1.000 19.20
ANISOU 2139 CA  ARG  307 3053    1963    2277    -675  -1236 6 4 3
ATOM   2140 C   ARG  307 9.086   2.191   53.611 1.000 23.08
ANISOU 2140 C   ARG  307 4018    1905    2847    -270  -1885 3 2 9
ATOM   2141 O   ARG  307 8.636   1.292   52.895 1.000 35.93
ANISOU 2141 O   ARG  307 6003    2403    5244    38 -3227 - 7 9 1
ATOM   2142 CB  ARG  307 7.131   2.918   54.997 1.000 28.25
ANISOU 2142 CB  ARG  307 5557    3297    1882    -1503 -277 5 0 9
ATOM   2143 CG  ARG  307 6.032   3.921   55.275 1.000 33.39
ANISOU 2143 CG  ARG  307 4564    4859    3261    -1613 731  2 0 8
ATOM   2144 CD  ARG  307 5.022   3.523   56.317 1.000 40.42
ANISOU 2144 CD  ARG  307 6335    5701    3322    -1900 1263 9 7 1
ATOM   2145 NE  ARG  307 5.605   2.952   57.529 1.000 50.83
ANISOU 2145 NE  ARG  307 8119    7287    3908    -2786 105  1 6 2 4
ATOM   2146 CZ  ARG  307 4.894   2.441   58.530 1.000 51.36
ANISOU 2146 CZ  ARG  307 7424    8064    4025    -3650 -966 2 4 5 1
ATOM   2147 NH1 ARG  307 3.567   2.422   58.485 1.000 69.51
ANISOU 2147 NH1 ARG  307 7586    10951   7874    -6970 -2008 3 2 4 5
ATOM   2148 NH2 ARG  307 5.489   1.937   59.600 1.000 59.99
ANISOU 2148 NH2 ARG  307 10714   8150    3930    -5986 -3291 2 0 2 8
ATOM   2149 N   THR  308 10.347  2.147   54.048 1.000 22.92
ANISOU 2149 N   THR  308 2759    2587    3364    -589  -200 1 7 0
ATOM   2150 CA  THR  308 11.215  1.009   53.794 1.000 24.47
ANISOU 2150 CA  THR  308 3382    2649    3268    -360   52 1 5 0
ATOM   2151 C   THR  308 10.602  -0.252  54.382 1.000 31.10
ANISOU 2151 C   THR  308 5251    2520    4044    -768   16 2 7 9
ATOM   2152 O   THR  308 10.610  -1.292  53.718 1.000 31.44
ANISOU 2152 O   THR  308 4573    2676    4696    -457  -1745 - 4 0
ATOM   2153 CB  THR  308 12.615  1.279   54.378 1.000 23.51
ANISOU 2153 CB  THR  308 3718    2086    3131    413   -694 5 4 2
ATOM   2154 OG1 THR  308 13.195  2.410   53.705 1.000 23.61
ANISOU 2154 OG1 THR  308 2711    2503    3754    153   437  - 9
ATOM   2155 CG2 THR  308 13.573  0.141   54.117 1.000 26.37
ANISOU 2155 CG2 THR  308 4427    2796    2796    927   -329 - 1 8
ATOM   2156 N   SER  309 10.066  -0.156  55.596 1.000 28.39
ANISOU 2156 N   SER  309 3759    2774    4252    -19   2  1 3 0 0
ATOM   2157 CA  SER  309 9.488   -1.335  56.238 1.000 34.69
ANISOU 2157 CA  SER  309 6110    3146    3925    -1066 -1089 1 6 2 6
ATOM   2158 C   SER  309 8.109   -1.737  55.724 1.000 41.41
ANISOU 2158 C   SER  309 6442    3910    5383    -2171 -1170 2 1 4 4
ATOM   2159 O   SER  309 7.672   -2.884  55.952 1.000 57.05
ANISOU 2159 O   SER  309 11389   5141    5146    -4907 -2077 2 0 2 7
ATOM   2160 CB  SER  309 9.450   -1.104  57.755 1.000 31.61
ANISOU 2160 CB  SER  309 4863    2958    4188    -483  368  9 6 2
ATOM   2161 OG  SER  309 8.485   -0.135  58.107 1.000 38.99
ANISOU 2161 OG  SER  309 4731    3477    6604    313   -2249 - 4 9 6
ATOM   2162 N   LYS  310 7.391   -0.868  55.032 1.000 47.69
ANISOU 2162 N   LYS  310 5502    5577    7040    -539  -1369 1 5 8 3
ATOM   2163 FE  IUM  312 8.574   13.466  54.055 1.000 11.05
ANISOU 2163 FE  IUM  312 1690    1156    1351    -101  -237 7  1
ATOM   2164 C1  AKG  313 5.987   14.815  54.612 1.000 19.65
ANISOU 2164 C1  AKG  313 2777    2119    2572    258   -117 5 5 6
ATOM   2165 O1  AKG  313 4.799   15.240  54.659 1.000 20.82
ANISOU 2165 O1  AKG  313 2957    2293    2659    514   -234 2 6 4
ATOM   2166 O2  AKG  313 6.643   14.144  53.787 1.000 17.79
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ANISOU	2166	O2	AKG	313	2407	1765	2587	74	-377 429
ATOM	2167	C2	AKG	313	6.867	15.178	55.844	1.000	20.08
ANISOU	2167	C2	AKG	313	1997	2566	3068	-528	419 -399
ATOM	2168	O5	AKG	313	7.982	14.661	55.821	1.000	17.60
ANISOU	2168	O5	AKG	313	2289	2066	2334	-314	226 -252
ATOM	2169	C3	AKG	313	6.272	16.080	56.872	1.000	21.69
ANISOU	2169	C3	AKG	313	2751	1910	3581	240	62 -327
ATOM	2170	C4	AKG	313	7.318	16.741	57.716	1.000	21.50
ANISOU	2170	C4	AKG	313	3246	1761	3160	199	-143 -185
ATOM	2171	C5	AKG	313	6.923	17.816	58.672	1.000	22.58
ANISOU	2171	C5	AKG	313	3122	1840	3618	755	-495 -313
ATOM	2172	O3	AKG	313	7.754	18.591	59.124	1.000	27.48
ANISOU	2172	O3	AKG	313	3581	2470	4389	-34	602 -1266
ATOM	2173	O4	AKG	313	5.660	17.889	58.999	1.000	28.55
ANISOU	2173	O4	AKG	313	3191	2809	4846	612	-246 -1148
ATOM	2174	S	SO4	401	11.676	0.439	24.942	1.000	40.14
ATOM	2175	O1	SO4	401	11.293	0.826	26.321	1.000	33.12
ATOM	2176	O2	SO4	401	12.501	-0.829	25.014	1.000	35.79
ATOM	2177	O3	SO4	401	10.430	0.189	24.129	1.000	54.89
ATOM	2178	O4	SO4	401	12.500	1.520	24.329	1.000	44.80
ATOM	2179	OW	HOH	501	-6.455	10.219	44.319	1.000	14.29
ATOM	2180	OW	HOH	502	-10.520	18.612	50.560	1.000	12.86
ATOM	2181	OW	HOH	503	-8.644	16.907	47.858	1.000	16.83
ATOM	2182	OW	HOH	504	-10.313	20.800	43.074	1.000	16.10
ATOM	2183	OW	HOH	505	-6.051	19.199	52.602	1.000	16.38
ATOM	2184	OW	HOH	506	-6.873	24.642	47.100	1.000	20.55
ATOM	2185	OW	HOH	507	10.676	-4.179	46.406	1.000	27.41
ATOM	2186	OW	HOH	508	-0.077	21.786	40.872	1.000	15.22
ATOM	2187	OW	HOH	509	5.761	13.656	46.041	1.000	17.40
ATOM	2188	OW	HOH	510	29.135	31.449	51.982	1.000	18.40
ATOM	2189	OW	HOH	511	26.032	32.724	52.741	1.000	17.03
ATOM	2190	OW	HOH	512	10.965	32.371	46.000	1.000	16.70
ATOM	2191	OW	HOH	513	23.871	24.457	58.649	1.000	18.71
ATOM	2192	OW	HOH	514	26.353	29.063	50.326	1.000	18.96
ATOM	2193	OW	HOH	515	23.191	33.106	53.153	1.000	20.41
ATOM	2194	OW	HOH	516	21.429	11.721	55.329	1.000	18.39
ATOM	2195	OW	HOH	517	9.122	15.567	53.585	1.000	24.87
ATOM	2196	OW	HOH	518	27.843	17.352	53.437	1.000	27.76
ATOM	2197	OW	HOH	519	-14.415	20.029	44.444	1.000	23.47
ATOM	2198	OW	HOH	520	15.253	33.050	51.771	1.000	27.20
ATOM	2199	OW	HOH	521	14.080	31.486	44.302	1.000	21.58
ATOM	2200	OW	HOH	522	17.770	33.842	53.596	1.000	23.56
ATOM	2201	OW	HOH	523	3.671	24.673	36.173	1.000	20.95
ATOM	2202	OW	HOH	524	-15.683	28.618	52.535	1.000	24.05
ATOM	2203	OW	HOH	525	-5.386	20.413	39.013	1.000	26.85
ATOM	2204	OW	HOH	526	10.417	27.949	58.778	1.000	28.33
ATOM	2205	OW	HOH	527	23.165	19.592	62.202	1.000	29.36
ATOM	2206	OW	HOH	528	23.736	10.550	55.737	1.000	24.02
ATOM	2207	OW	HOH	529	-1.662	28.650	42.485	1.000	21.62
ATOM	2208	OW	HOH	530	-4.689	10.177	46.511	1.000	31.65
ATOM	2209	OW	HOH	531	1.545	35.657	50.866	1.000	19.59
ATOM	2210	OW	HOH	532	0.980	22.687	36.818	1.000	30.57
ATOM	2211	OW	HOH	533	-12.450	16.848	56.071	1.000	28.42
ATOM	2212	OW	HOH	534	-9.418	16.139	51.364	1.000	22.60
ATOM	2213	OW	HOH	535	32.711	25.816	43.116	1.000	31.44
ATOM	2214	OW	HOH	536	27.068	24.587	55.468	1.000	23.32
ATOM	2215	OW	HOH	537	13.523	11.832	51.199	1.000	10.73
ATOM	2216	OW	HOH	538	8.513	16.158	35.074	1.000	12.26
ATOM	2217	OW	HOH	539	0.922	2.590	35.058	1.000	14.79
ATOM	2218	OW	HOH	540	-1.548	3.709	34.484	1.000	14.25
ATOM	2219	OW	HOH	541	11.711	16.898	30.416	1.000	17.84

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ATOM   2220 OW   HOH   542  15.389  11.536  32.065  1.000 17.88
ATOM   2221 OW   HOH   543  18.496   6.995  52.191  1.000 17.47
ATOM   2222 OW   HOH   544  19.848  22.580  35.334  1.000 17.28
ATOM   2223 OW   HOH   545  -0.387   4.787  41.967  1.000 13.22
ATOM   2224 OW   HOH   546  23.502  12.662  35.308  1.000 18.14
ATOM   2225 OW   HOH   547  10.332  25.236  33.926  1.000 19.05
ATOM   2226 OW   HOH   548  21.447  20.605  34.090  1.000 17.24
ATOM   2227 OW   HOH   549   8.164   7.685  27.077  1.000 25.40
ATOM   2228 OW   HOH   550  14.393  -5.127  40.321  1.000 15.88
ATOM   2229 OW   HOH   551  12.873  29.356  39.662  1.000 16.45
ATOM   2230 OW   HOH   552  11.974  24.144  58.426  1.000 19.71
ATOM   2231 OW   HOH   553  17.521   7.949  33.182  1.000 17.90
ATOM   2232 OW   HOH   554   3.401   2.691  43.340  1.000 23.76
ATOM   2233 OW   HOH   555  18.669  28.057  40.079  1.000 18.44
ATOM   2234 OW   HOH   556  10.827  12.928  30.017  1.000 19.57
ATOM   2235 OW   HOH   557  20.630  16.270  66.466  1.000 20.84
ATOM   2236 OW   HOH   558  11.315  20.266  64.044  1.000 21.62
ATOM   2237 OW   HOH   559  26.277  14.516  43.946  1.000 16.22
ATOM   2238 OW   HOH   560   9.616  15.488  32.365  1.000 19.40
ATOM   2239 OW   HOH   561   8.888   4.903  27.857  1.000 22.74
ATOM   2240 OW   HOH   562  20.496  -1.851  42.511  1.000 22.98
ATOM   2241 OW   HOH   563  17.033  29.415  38.332  1.000 26.36
ATOM   2242 OW   HOH   564  18.595   6.141  37.697  1.000 25.10
ATOM   2243 OW   HOH   565  22.446  13.893  31.420  1.000 29.00
ATOM   2244 OW   HOH   566   6.586   3.577  28.350  1.000 27.82
ATOM   2245 OW   HOH   567   6.250  20.077  30.961  1.000 23.27
ATOM   2246 OW   HOH   568   7.341  16.113  31.186  1.000 28.59
ATOM   2247 OW   HOH   569  16.090  32.070  42.552  1.000 33.08
ATOM   2248 OW   HOH   570  11.500  28.806  37.258  1.000 25.17
ATOM   2249 OW   HOH   571  12.901  26.768  58.591  1.000 28.58
ATOM   2250 OW   HOH   572 -17.071  17.043  50.450  1.000 28.82
ATOM   2251 OW   HOH   573  25.262   7.705  37.199  1.000 39.05
ATOM   2252 OW   HOH   574  32.884  26.440  51.734  1.000 29.03
ATOM   2253 OW   HOH   575  -1.199  19.088  42.527  1.000 14.86
ATOM   2254 OW   HOH   576  -4.389  33.026  63.392  1.000 29.56
ATOM   2255 OW   HOH   577  17.569  25.732  32.249  1.000 20.62
ATOM   2256 OW   HOH   578 -19.107  12.822  67.516  1.000 22.35
ATOM   2257 OW   HOH   579  29.333  19.198  51.975  1.000 22.51
ATOM   2258 OW   HOH   580  27.950  27.635  51.903  1.000 25.40
ATOM   2259 OW   HOH   581 -21.085  14.501  68.535  1.000 21.19
ATOM   2260 OW   HOH   582   1.529  17.378  33.953  1.000 25.29
ATOM   2261 OW   HOH   583   9.138  20.887  66.894  1.000 33.92
ATOM   2262 OW   HOH   584 -11.896  19.091  44.780  1.000 17.48
ATOM   2263 OW   HOH   585   6.382  12.597  43.347  1.000 22.09
ATOM   2264 OW   HOH   586  17.762  21.268  29.046  1.000 20.79
ATOM   2265 OW   HOH   587 -11.500  25.438  41.729  1.000 29.68
ATOM   2266 OW   HOH   588   7.877   1.046  29.689  1.000 27.70
ATOM   2267 OW   HOH   589  27.985  13.540  42.235  1.000 25.91
ATOM   2268 OW   HOH   590   1.276  14.852  34.021  1.000 20.41
ATOM   2269 OW   HOH   591  24.622  24.179  41.242  1.000 26.77
ATOM   2270 OW   HOH   592   0.404  14.096  36.006  1.000 27.92
ATOM   2271 OW   HOH   593  -2.835  36.981  57.827  1.000 31.86
ATOM   2272 OW   HOH   594   3.276   0.788  39.940  1.000 32.07
ATOM   2273 OW   HOH   595  11.025  -8.794  31.468  1.000 27.18
ATOM   2274 OW   HOH   596   6.301   2.276  42.639  1.000 29.74
ATOM   2275 OW   HOH   597  29.302  16.146  62.924  1.000 43.75
ATOM   2276 OW   HOH   598  19.039  20.964  67.011  1.000 30.85
ATOM   2277 OW   HOH   599   8.380  22.088  64.518  1.000 42.62
ATOM   2278 OW   HOH   600  21.480  10.826  34.742  1.000 25.74
ATOM   2279 OW   HOH   601  -2.907  21.956  38.566  1.000 30.92
ATOM   2280 OW   HOH   602  -3.928  29.841  43.352  1.000 43.96
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ATOM   2281 OW   HOH   603 2.885   21.563  34.437  1.000 33.10
ATOM   2282 OW   HOH   604 11.801  6.043   25.270  1.000 38.18
ATOM   2283 OW   HOH   605 -1.019  17.197  40.472  1.000 18.48
ATOM   2284 OW   HOH   606 18.382  23.349  68.110  1.000 22.54
ATOM   2285 OW   HOH   607 -8.141  8.137   45.609  1.000 17.64
ATOM   2286 OW   HOH   608 5.022   2.667   51.700  1.000 24.29
ATOM   2287 OW   HOH   609 17.557  10.755  33.490  1.000 21.94
ATOM   2288 OW   HOH   610 11.222  1.201   49.675  1.000 20.61
ATOM   2289 OW   HOH   611 4.243   35.047  50.509  1.000 22.18
ATOM   2290 OW   HOH   612 11.103  4.031   56.082  1.000 22.08
ATOM   2291 OW   HOH   613 11.366  31.522  36.791  1.000 32.32
ATOM   2292 OW   HOH   614 -21.189 24.787  52.739  1.000 31.83
ATOM   2293 OW   HOH   615 7.847   -1.491  30.674  1.000 24.77
ATOM   2294 OW   HOH   616 19.041  11.937  31.445  1.000 25.97
ATOM   2295 OW   HOH   617 6.221   29.879  40.410  1.000 29.24
ATOM   2296 OW   HOH   618 17.266  5.933   35.280  1.000 23.72
ATOM   2297 OW   HOH   619 5.983   -7.215  28.510  1.000 28.19
ATOM   2298 OW   HOH   620 22.574  8.129   57.639  1.000 30.97
ATOM   2299 OW   HOH   621 2.553   7.806   60.287  1.000 28.77
ATOM   2300 OW   HOH   622 29.939  25.812  51.234  1.000 34.00
ATOM   2301 OW   HOH   623 2.205   34.823  53.632  1.000 25.88
ATOM   2302 OW   HOH   624 18.091  13.838  67.343  1.000 28.46
ATOM   2303 OW   HOH   625 8.342   3.195   58.475  1.000 26.84
ATOM   2304 OW   HOH   626 -16.086 18.427  42.790  1.000 31.11
ATOM   2305 OW   HOH   627 -2.098  13.445  35.620  1.000 27.48
ATOM   2306 OW   HOH   628 0.481   30.471  42.834  1.000 32.55
ATOM   2307 OW   HOH   629 13.368  33.845  42.899  1.000 28.70
ATOM   2308 OW   HOH   630 -13.792 14.642  51.533  1.000 25.58
ATOM   2309 OW   HOH   631 3.299   1.461   29.242  1.000 39.62
ATOM   2310 OW   HOH   632 -16.012 20.690  46.705  1.000 27.75
ATOM   2311 OW   HOH   633 19.606  8.142   31.259  1.000 27.02
ATOM   2312 OW   HOH   634 5.077   7.954   57.205  1.000 30.59
ATOM   2313 OW   HOH   635 -1.502  6.963   45.877  1.000 35.68
ATOM   2314 OW   HOH   636 9.974   17.449  38.804  1.000 21.84
ATOM   2315 OW   HOH   637 -22.829 12.836  67.228  1.000 25.04
ATOM   2316 OW   HOH   638 6.275   34.333  39.722  1.000 25.88
ATOM   2317 OW   HOH   639 2.248   19.798  56..051 1.000 26.67
ATOM   2318 OW   HOH   640 -20.552 17.013  67.454  1.000 31.34
ATOM   2319 OW   HOH   641 9.298   16.570  28.911  1.000 29.96
ATOM   2320 OW   HOH   642 -1.732  11.113  60.074  1.000 28.13
ATOM   2321 OW   HOH   643 34.157  23.604  44.657  1.000 36.36
ATOM   2322 OW   HOH   644 24.298  20.199  33.576  1.000 34.90
ATOM   2323 OW   HOH   645 13.803  -4.667  31.570  1.000 32.66
ATOM   2324 OW   HOH   646 6.295   -2.594  29.009  1.000 34.61
ATOM   2325 OW   HOH   647 5.623   37.039  49.318  1.000 28.08
ATOM   2326 OW   HOH   648 -18.805 19.286  46.868  1.000 38.32
ATOM   2327 OW   HOH   649 16.026  35.829  49.382  1.000 34.45
ATOM   2328 OW   HOH   650 -12.187 28.769  45.330  1.000 27.36
ATOM   2329 OW   HOH   651 21.344  5.778   55.101  1.000 27.43
ATOM   2330 OW   HOH   652 -1.848  2.125   32.240  1.000 32.02
ATOM   2331 OW   HOH   653 -14.568 18.811  55.775  1.000 29.95
ATOM   2332 OW   HOH   654 -8.655  26.254  38.301  1.000 32.07
ATOM   2333 OW   HOH   655 18.836  13.542  28.102  1.000 32.24
ATOM   2334 OW   HOH   656 16.217  14.669  25.619  1.000 33.35
ATOM   2335 OW   HOH   657 28.678  14.477  38.043  1.000 30.94
ATOM   2336 OW   HOH   658 -11.834 15.408  53.330  1.000 33.25
ATOM   2337 OW   HOH   659 -1.317  38.273  59.599  1.000 34.45
ATOM   2338 OW   HOH   660 8.784   13.918  28.681  1.000 33.62
ATOM   2339 OW   HOH   661 -3.058  14.508  47.405  1.000 28.79
ATOM   2340 OW   HOH   662 10.968  33.651  38.533  1.000 36.21
ATOM   2341 OW   HOH   663 28.960  21.602  53.665  1.000 29.25
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ATOM	2342	OW	HOH	664	-10.709	26.808	39.175	1.000	42.71
ATOM	2343	OW	HOH	665	17.790	7.093	55.023	1.000	30.29
ATOM	2344	OW	HOH	666	6.404	24.865	29.848	1.000	34.55
ATOM	2345	OW	HOH	667	-15.418	19.777	58.341	1.000	33.82
ATOM	2346	OW	HOH	668	0.000	0.000	37.259	0.330	49.90
ATOM	2347	OW	HOH	669	19.652	24.610	33.660	1.000	31.77
ATOM	2348	OW	HOH	670	17.188	9.619	29.950	1.000	29.94
ATOM	2349	OW	HOH	671	17.708	2.958	28.338	1.000	34.94
ATOM	2350	OW	HOH	672	-0.059	3.652	30.079	1.000	32.23
ATOM	2351	OW	HOH	673	29.037	20.923	56.153	1.000	28.52
ATOM	2352	OW	HOH	674	-15.435	31.088	53.795	1.000	35.61
ATOM	2353	OW	HOH	675	-12.846	21.220	61.856	1.000	38.79
ATOM	2354	OW	HOH	676	10.299	39.666	49.554	1.000	40.30
ATOM	2355	OW	HOH	677	-5.921	28.822	41.521	1.000	34.01
ATOM	2356	OW	HOH	678	6.029	39.991	46.094	1.000	42.69
ATOM	2357	OW	HOH	679	35.052	23.156	52.356	1.000	40.17
ATOM	2358	OW	HOH	680	-12.008	38.355	51.601	1.000	35.18
ATOM	2359	OW	HOH	681	3.061	13.047	53.152	1.000	35.17
ATOM	2360	OW	HOH	682	1.379	2.075	27.532	1.000	46.38
ATOM	2361	OW	HOH	683	-0.516	-2.480	37.686	1.000	21.77
ATOM	2362	OW	HOH	684	4.567	10.310	43.503	1.000	24.86
ATOM	2363	OW	HOH	685	19.443	5.558	61.133	1.000	36.06
ATOM	2364	OW	HOH	686	3.205	29.499	40.656	1.000	36.99
ATOM	2365	OW	HOH	687	32.498	16.774	43.447	1.000	41.18
ATOM	2366	OW	HOH	688	28.166	23.113	57.593	1.000	35.56
ATOM	2367	OW	HOH	689	-17.023	23.220	46.759	1.000	30.05
ATOM	2368	OW	HOH	690	15.567	7.782	28.910	1.000	32.51
ATOM	2369	OW	HOH	691	11.780	30.287	57.203	1.000	33.34
ATOM	2370	OW	HOH	692	24.449	12.699	32.400	1.000	34.99
ATOM	2371	OW	HOH	693	26.200	25.005	57.918	1.000	39.38